DAIKIN

EDUS 39 - 600 - F3_b

R-410A

Engineering Data

FXSQ-M
Ceiling Mounted Built-In Type

DAIKIN AC (AMERICAS), INC.

FXSQ-M
Ceiling Mounted Built-In Type

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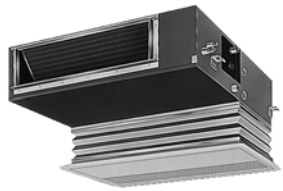
1. Features

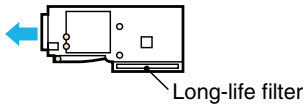
A The Ceiling Mounted Built-In Type is a highly flexible air-conditioning system adaptable to a wide range of needs and is designed to facilitate maintenance while providing a high quality environment.

- Offers a wide variety of optional functions, giving you the freedom to choose the best setup for both interior design and convenient maintenance.

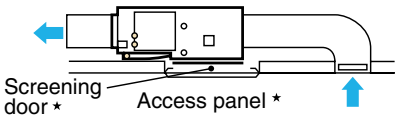


Installation Examples (★Optional Parts)

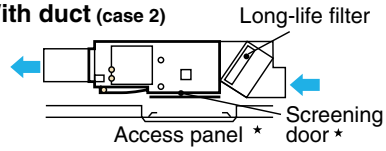
●**Standard**



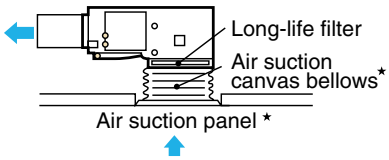
●**With duct (case 1)**



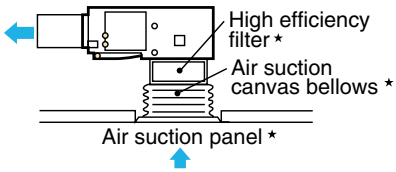
●**With duct (case 2)**



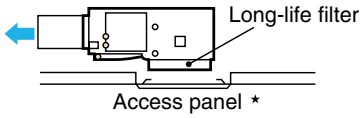
●**Cassette style (standard filter)**



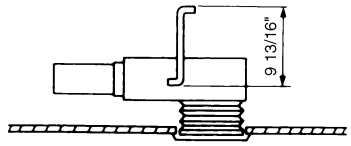
●**Cassette style (high efficiency filter)**



●**Ceiling return**



- Layout is unrestricted and design is easy with optional flexible ducts that do not require the duct work of regular ducts.
- Offers a selection of 6 models ranging from 12 class (equivalent to 1 ton) to Maximum 48 class (equivalent to 4 tons).
- All models feature thin design (11 7/8" height) that enable installation in shallow ceiling pockets. .
- Equipped with a programmed drying mode that dehumidifies without changing room temperature.
- Includes as standard equipment a long-life filter, treated for mold resistance, that is maintenancefree for approximately one year.
- Includes as standard equipment a drain pump kit that can drain upward to 9 13/16" from the drain pipe opening.



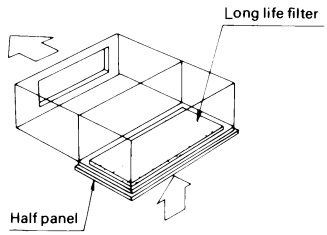
- Quiet air conditioner that preserves the mood of your office.

Capacity	12 type	18 type	24 type	30 type	36 type	48 type
Operating sound (dBA)	41/35	44/38	44/38	45/39	45/39	48/43

- Two types of high-efficiency filters, 65% and 90% using the colorimetric method are available. These cannot be used with rear suction types.
- Suction half-panel is thin and unimposing to blend with ceiling designs and provide an excellent finishing touch. .

Example of Installation (Built-In)

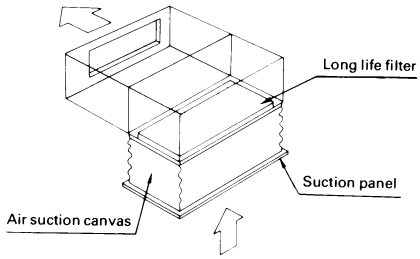
■ Direct installation of half panel



(V0082)

Model		FXSQ12M	FXSQ18M	FXSQ24M	FXSQ30M FXSQ36M FXSQ48M
Necessary Options	Remote Controller	BRC1D71			
	Half Panel	BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1

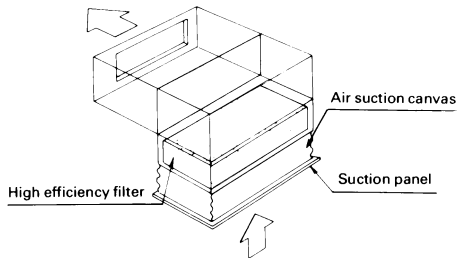
■ Installation of half panel and suction canvas



(V0083)

Model		FXSQ12M	FXSQ18M	FXSQ24M	FXSQ30M FXSQ36M FXSQ48M
Necessary Options	Remote Controller	BRC1D71			
	Half Panel	BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1
	Air Suction Canvas	KSA-25K36	KSA-25K56	KSA-25K80	KSA-25L160

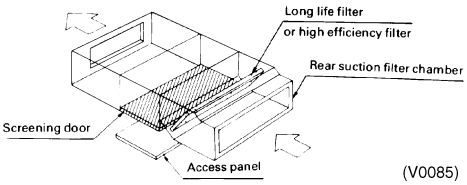
■ Installation like ceiling mounted cassette type with a high-efficiency filter



(V0084)

Model			FXSQ12M	FXSQ18M	FXSQ24M	FXSQ30M FXSQ36M FXSQ48M
Necessary Options	Remote Controller		BRC1D71			
	Half Panel		BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1
	High Efficiency Filter	NBS65%	KAFJ252L36	KAFJ252L56	KAFJ252L80	KAFJ252L160
		NBS90%	KAFJ253L36	KAFJ253L56	KAFJ253L80	KAFJ253L160
	Air Suction Canvas		KSA-25K36	KSA-25K56	KSA-25K80	KSA-25L160
	Bottom Suction Filter Chamber		KAJ25L36D	KAJ25L56D	KAJ25L80D	KAJ25L160D

■ Installation with duct (A)

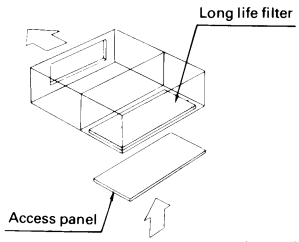


(V0085)

The access panel should be fitted beneath the main body of the unit.

Model			FXSQ12M	FXSQ18M	FXSQ24M	FXSQ30M FXSQ36M FXSQ48M
Necessary Options	Remote Controller		BRC1D71			
	Access Panel		KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
	Rear Suction Filter Chamber		KAJ25L36B	KAJ25L56B	KAJ25L80B	KAJ25L160B
	Screening Door		KBBJ25K36	KBBJ25K56	KBBJ25K80	KBBJ25K160
	High Efficiency Filter (If Necessary)	NBS65%	KAFJ252L36	KAFJ252L56	KAFJ252L80	KAFJ252L160
		NBS90%	KAFJ253L36	KAFJ253L56	KAFJ253L80	KAFJ253L160

■ Ceiling return

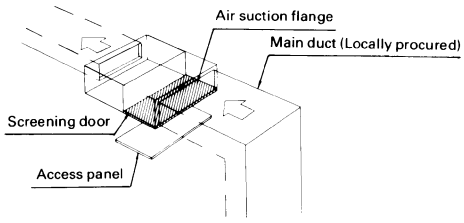


(V0086)

The access panel should be fitted beneath the main body of the unit.

Model		FXSQ12M	FXSQ18M	FXSQ24M	FXSQ30M FXSQ36M FXSQ48M
Necessary Options	Remote Controller	BRC1D71			
	Access Panel	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W

■ Installation with duct (B)



(V0087)

The access panel should be fitted beneath the main body of the unit.

Model		FXSQ12M	FXSQ18M	FXSQ24M	FXSQ30M FXSQ36M FXSQ48M
Necessary Options	Remote Controller	BRC1D71			
	Access Panel	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
	Screening Door	KBBJ25K36	KBBJ25K56	KBBJ25K80	KBBJ25K160
	Air Suction Flange	KDJ2507K36	KDJ2507K56	KDJ2507K80	KDJ2507K160

2. Specifications

Ceiling Mounted Built-In Type

Model			FXSQ12MVJU	FXSQ18MVJU	FXSQ24MVJU
Cooling Capacity[1]		Btu/h	12,000	18,000	24,000
Heating Capacity[2]		Btu/h	13,500	20,000	27,000
Casing / Color			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		in (mm)	11-7/8×21-5/8×31-1/2 (301.6 x 549.3 x 800.1)	11-7/8×27-1/2×31-1/2 (301.6 x 698.5 x 800.1)	11-7/8×39-3/8×31-1/2 (301.6 x 1000.1 x 800.1)
Coil (Cross Fin Coil)	Rows×Stages×FPI		3 × 4 × 14	3 × 4 × 14	3×14×14
	Face Area	ft² (m²)	0.95 (0.29)	1.42 (0.43)	2.38 (0.72)
Fan	Model		D18H3A	D18H2A	2D18H2A
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output	kW	0.05	0.08	0.13
	Air Flow Rate (H/L)	cfm	340/230	530/390	740/490
	External Static Pressure[4]	in. Wg	0.37 - 0.19 - 0.06	0.37 - 0.19 - 0.06	0.37 - 0.19 - 0.06
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber	Glass Fiber
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	in / mm	ϕ1/4" / 6.4 mm (Flare Connection)	ϕ1/4" / 6.4 mm (Flare Connection)	ϕ3/8" / 9.5 mm (Flare Connection)
	Gas Pipes	in / mm	ϕ1/2" / 12.7 mm (Flare Connection)	ϕ1/2" / 12.7 mm (Flare Connection)	ϕ5/8" /15.8 mm (Flare Connection)
	Drain Pipe	in / mm	VP25 External Dia. 1-1/4" / 31.8 mm Internal Dia. 1" / 25.4 mm	VP25 External Dia. 1-1/4" / 31.8 mm Internal Dia. 1" / 25.4 mm	VP25 External Dia. 1-1/4" / 31.8 mm Internal Dia. 1" / 25.4 mm
Machine Weight (Mass)		Lbs	69	73	95
Sound Level (H/L)[5]		dBA	41/35	44/38	44/38
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable outdoor unit			R-410A Series	R-410A Series	R-410A Series
Decoration Panel (Option)	Model		BYBS32DJW1	BYBS45DJW1	BYBS71DJW1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	in (mm)	2-1/8×25-5/8×19-5/8 (54 x 650.9 x 498.5)	2-1/8×31-1/2×19-5/8 (54 x 800 x 498.5)	2-1/8×43-2/8×19-5/8 (54 x 1099 x 498.5)
	Weight	Lbs	6.6	7.7	9.9
Standard Accessories			Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.
Drawing No.			C:3D042684		

Notes:

1. Nominal cooling capacities are based on the following conditions:
   Return air temperature: 80°FDB, 67°FWB
   Outdoor temperature: 95°FDB
   Equivalent ref. piping length: 25 ft / 7.5 m (Horizontal)
2. Nominal heating capacities are based on the following conditions:
   Return air temperature: 70°FDB.
   Outdoor temperature: 47°FDB, 43°FWB
   Equivalent ref. piping length: 25 ft / 7.5 m (Horizontal)
3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
4. External static pressure is selectable from High to Medium to Low through a multi-tap connector on the indoor unit PCB.. Refer to the fan curves for actual fan performance.
5. Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of installation conditions.
6. Refer to page 17 for Power Input.

Ceiling Mounted Built-In Type

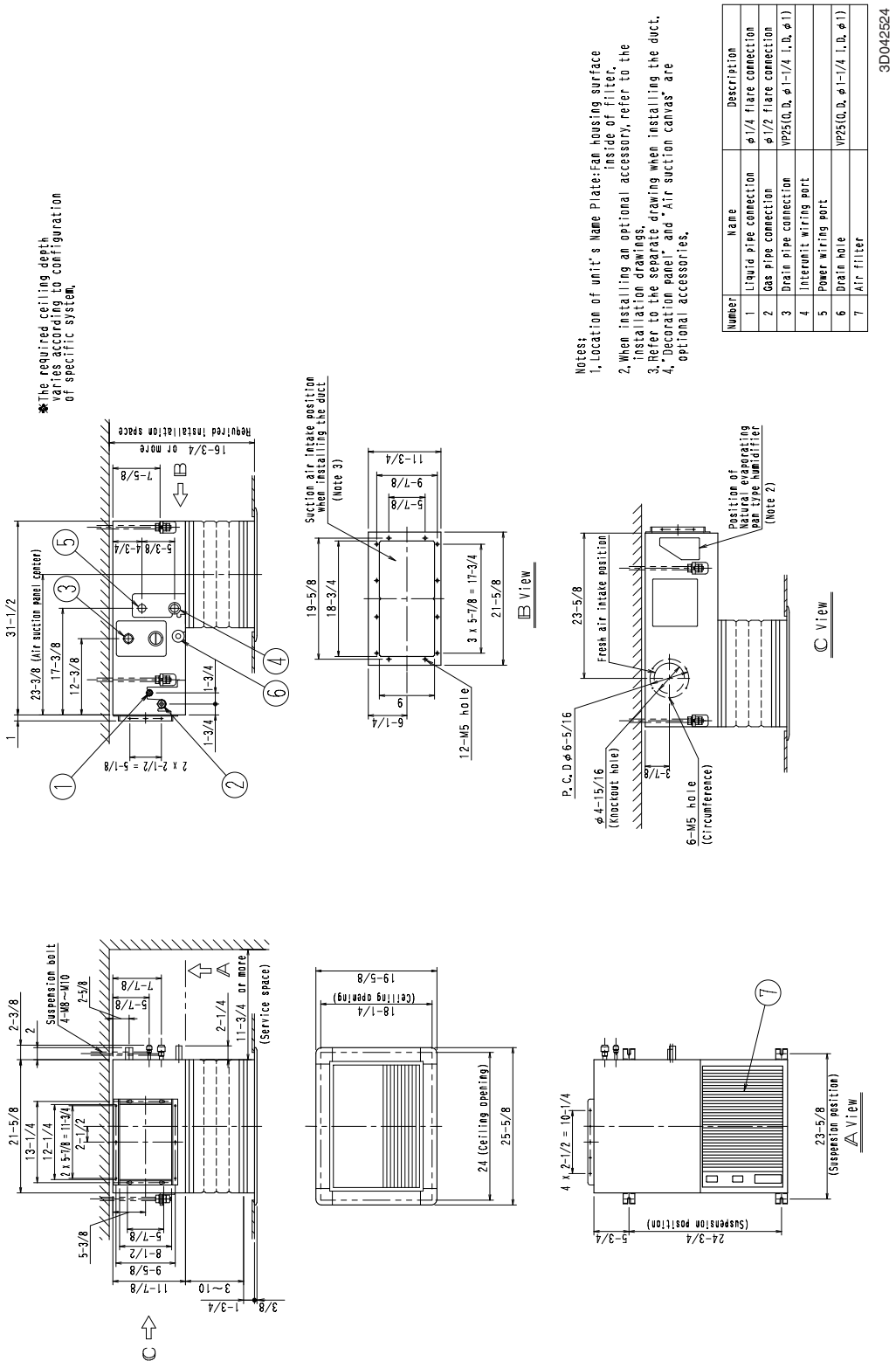
Model			FXSQ30MVJU	FXSQ36MVJU	FXSQ48MVJU
Cooling Capacity[1]		Btu/h	30,000	36,000	48,000
Heating Capacity[2]		Btu/h	34,000	40,000	54,000
Casing / Color			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		in (mm)	11-7/8 × 50-1/8 × 31-1/2 (301.6 x 1273.2 x 800.1)	11-7/8 × 50-1/8 × 31-1/2 (301.6 x 1273.2 x 800.1)	11-7/8 × 50-1/8 × 31-1/2 (301.6 x 1273.2 x 800.1)
Coil (Cross Fin Coil)	Rows × Stages × FPI		3 × 4 × 14	3 × 4 × 14	3 × 14 × 14
	Face Area	ft²	3.64	3.64	3.64
Fan	Model		3D18H2A	3D18H2A	3D18H2A
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output	kW	0.22	0.22	0.22
	Air Flow Rate (H/L)	cfm	950/720	990/740	1,300/950
	External Static Pressure[4]	in.Wg	0.57 - 0.39	0.57 - 0.35	0.34 - 0.10
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber	Glass Fiber
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	in (mm)	ϕ3/8" / 9.5 mm (Flare Connection)	ϕ3/8" / 9.5 mm (Flare Connection)	ϕ3/8" / 9.5 mm (Flare Connection)
	Gas Pipes	in (mm)	ϕ5/8" / 15.8 mm (Flare Connection)	ϕ5/8" / 15.8 mm (Flare Connection)	ϕ5/8" / 15.8 mm (Flare Connection)
	Drain Pipe	in (mm)	VP25 External Dia. 1-1/4" / 31.8 mm Internal Dia. 1" / 25.4 mm	VP25 External Dia. 1-1/4" / 31.8 mm Internal Dia. 1" / 25.4 mm	VP25 External Dia. 1-1/4" / 31.8 mm Internal Dia. 1" / 25.4 mm
Machine Weight (Mass)		Lbs	119	119	122
Sound Level (H/L)[5]		dBA	45/39	45/39	48/43
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable outdoor unit			R-410A Series	R-410A Series	R-410A Series
Decoration Panel (Option)	Model		BYBS125DJW1	BYBS125DJW1	BYBS125DJW1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	in (mm)	2-1/8 × 59 × 19-5/8 (54 x 1498.6 x 498.5)	2-1/8 × 59 × 19-5/8 (54 x 1498.6 x 498.5)	2-1/8 × 59 × 19-5/8 (54 x 1498.6 x 498.5)
	Weight	Lbs	14	14	14
Standard Accessories			Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.	Operation Manual, Installation Manual, Paper Pattern for Installation, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers.
Drawing No.			C:3D042684		

Notes:

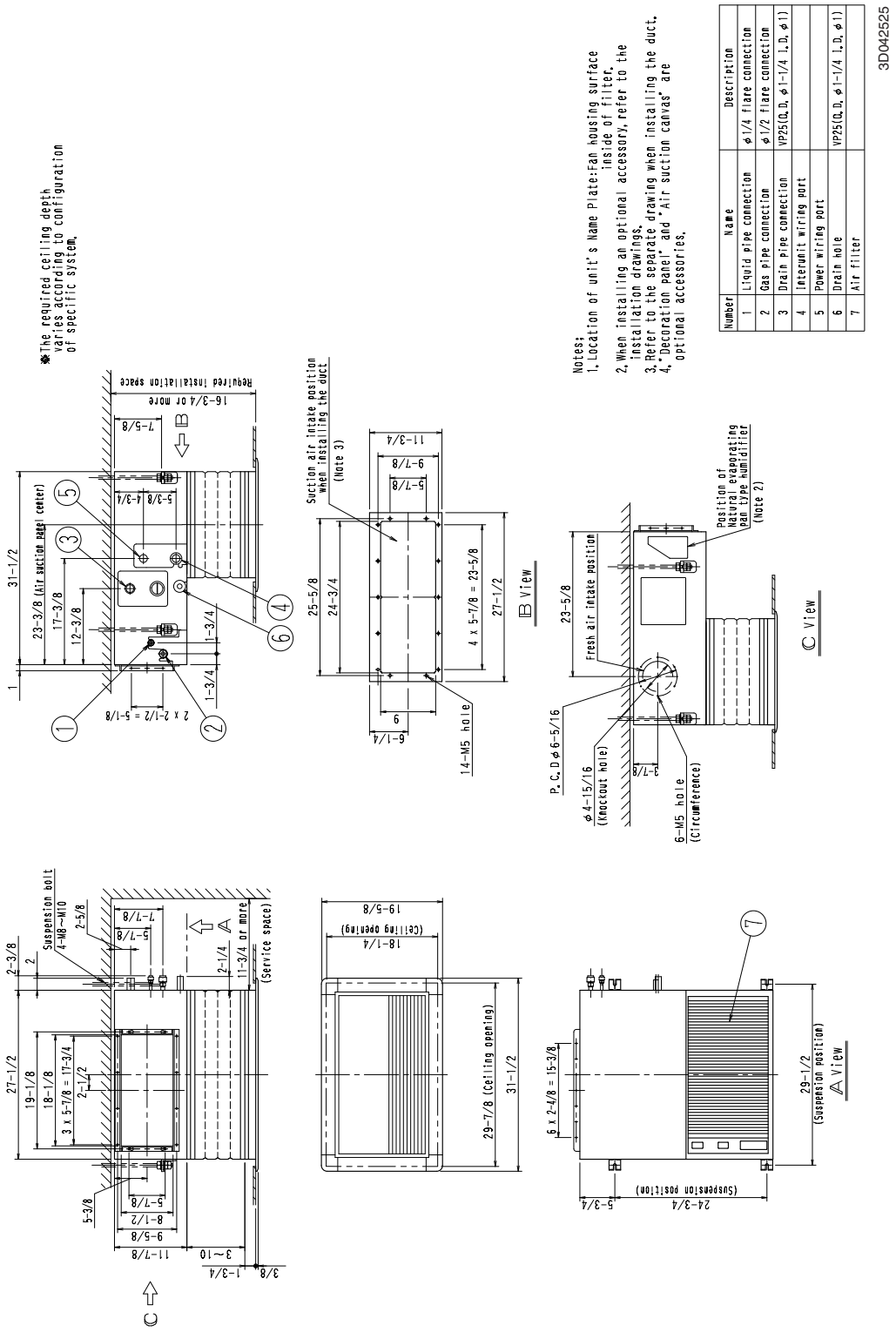
1. Nominal cooling capacities are based on the following conditions:
   Return air temperature: 80°FDB, 67°FWB
   Outdoor temperature: 95°FDB
   Equivalent ref. piping length: 25 ft / 7.5 m (Horizontal)
2. Nominal heating capacities are based on the following conditions:
   Return air temperature: 70°FDB.
   Outdoor temperature: 47°FDB, 43°FWB
   Equivalent ref. piping length: 25 ft / 7.5 m (Horizontal)
3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
4. External static pressure is selectable from High to Medium to Low through a multi-tap connector on the indoor unit PCB.. Refer to the fan curves for actual fan performance.
5. Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of installation conditions.
6. Refer to page 17 for Power Input.

3. Dimensions

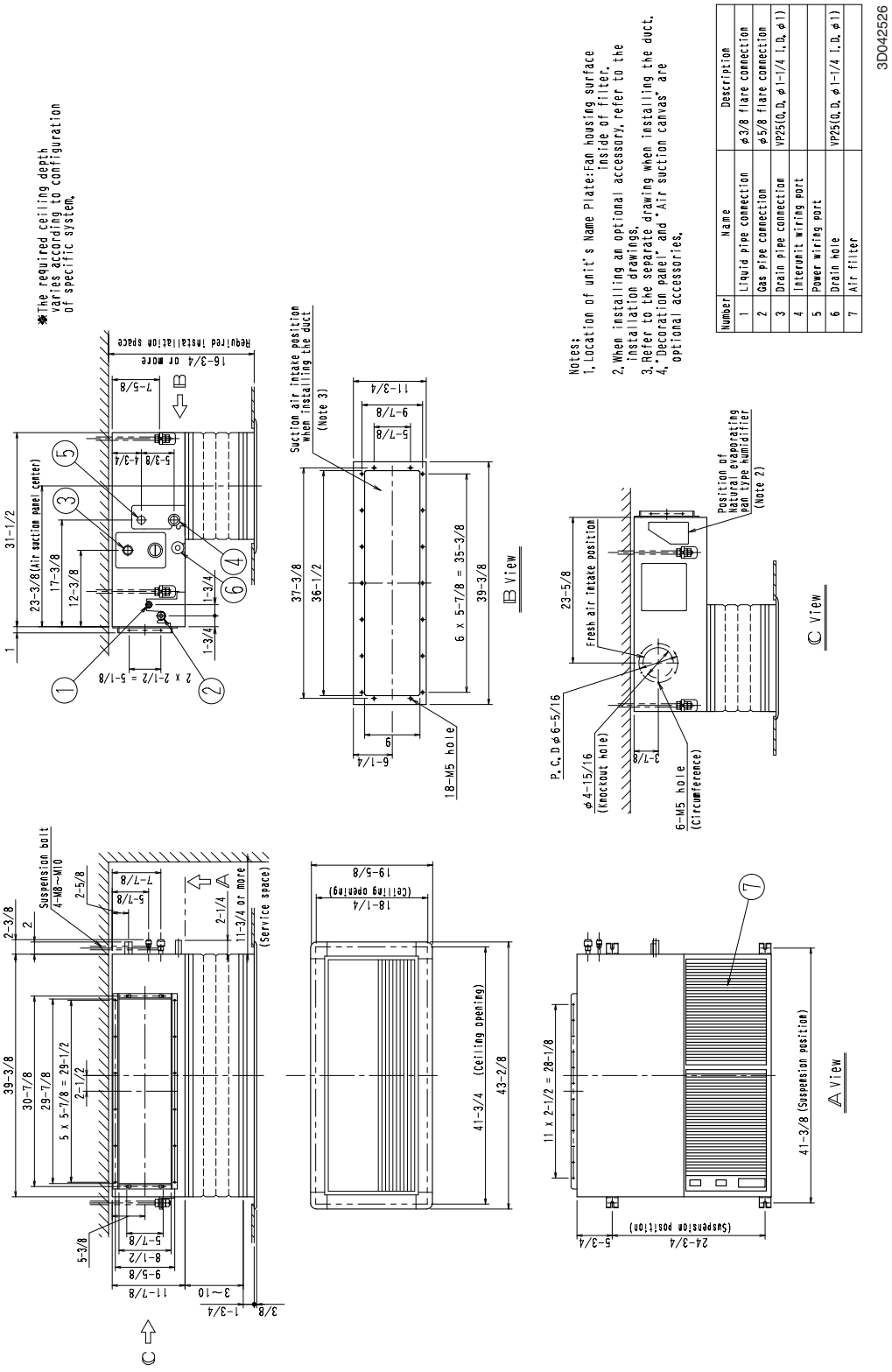
FXSQ12MVJU + BYBS32DJW1 (with Decoration Panel and Air Suction Canvas)



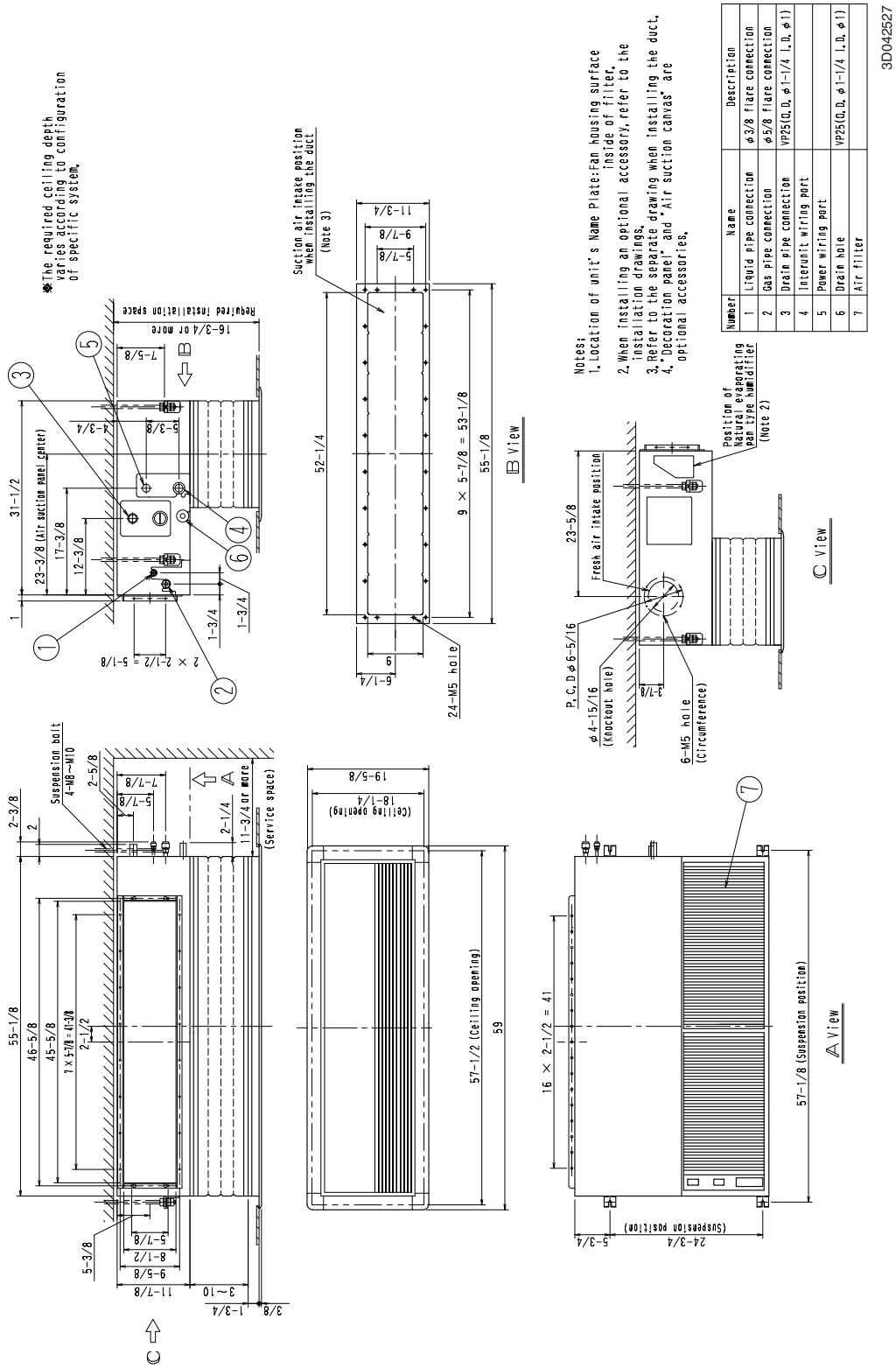
FXSQ18MVJU + BYBS45DJW1 (with Decoration Panel and Air Suction Canvas)


3D042525
Notes:
1. Location of unit's Name Plate:Fan housing surface inside of filter.
2. When installing an optional accessory, refer to the installation drawings.
3. Refer to the separate drawing when installing the duct.
4. "Decoration panel" and "Air suction canvas" are optional accessories.
Number | Name | Description
1 | Liquid pipe connection | φ1/4 flare connection
2 | Gas pipe connection | φ1/2 flare connection
3 | Drain pipe connection | VP25(O.D. φ1-1/4 I.D. φ1)
4 | Interunit wiring port
5 | Power wiring port
6 | Drain hole | VP25(O.D. φ1-1/4 I.D. φ1)
7 | Air filter
※The required ceiling depth varies according to configuration of specific system.
Required installation space
16-3/4 or more
B View
C View
A View
Suction air intake position when installing the duct (Note 3)
Fresh air intake position
Position of Natural evaporating pan type humidifier (Note 2)
Suspension bolt
4-M8~M10
(Service space)
(Ceiling opening)
(Suspension position)
2 x 2-1/2 = 5-1/8
4 x 5-7/8 = 23-5/8
3 x 5-7/8 = 17-3/4
6 x 2-4/8 = 15-3/8
14-M5 hole
6-M5 hole (Circumference)
P.C.D φ6-5/16
φ4-15/16 (Knockout hole)

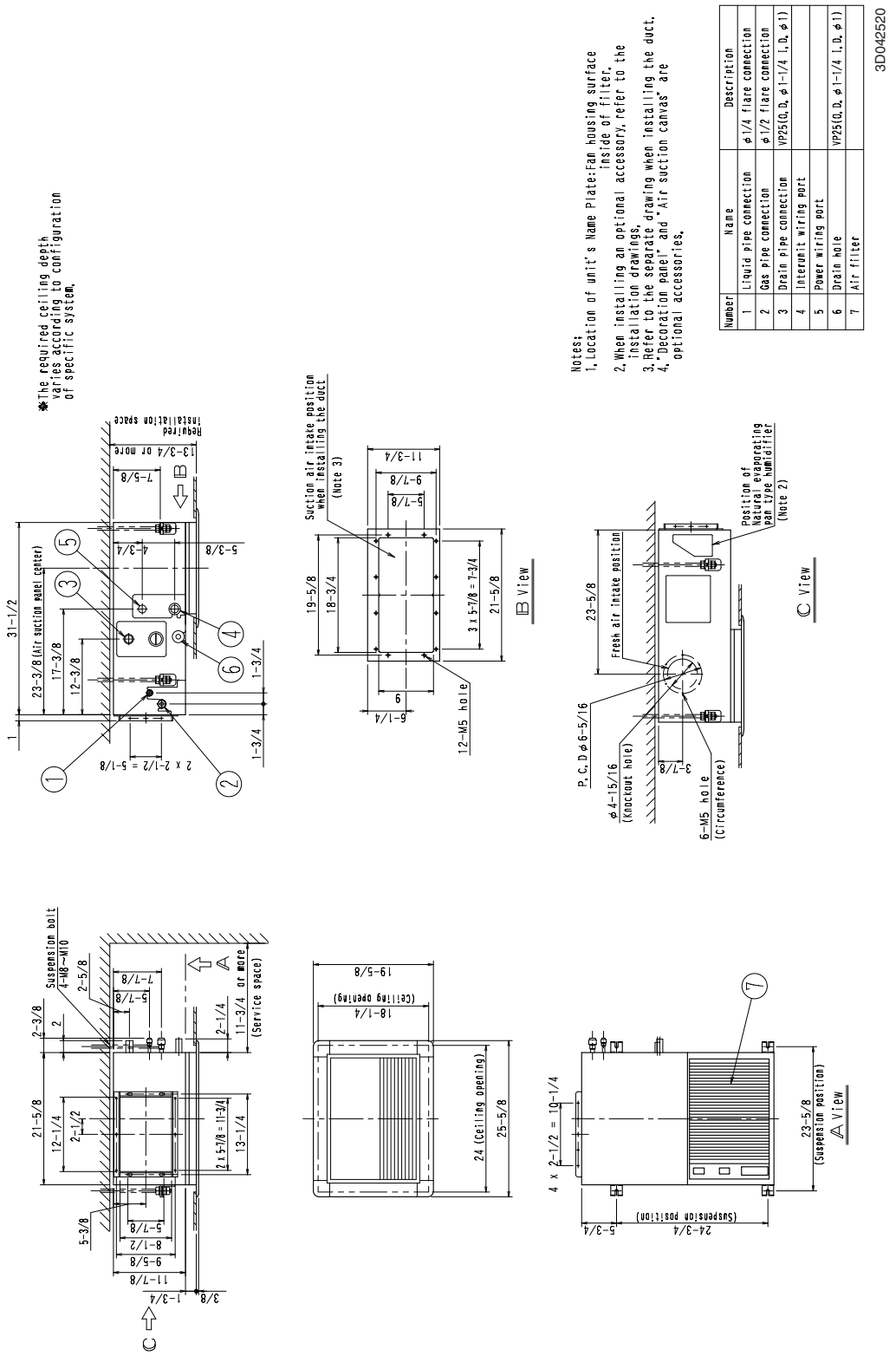
FXSQ24MVJU + BYBS71DJW1 (with Decoration Panel and Air Suction Canvas)


3D042526
Notes;
1. Location of unit's Name Plate:Fan housing surface inside of filter.
2. When installing an optional accessory, refer to the installation drawings.
3. Refer to the separate drawing when installing the duct.
4. "Decoration panel" and "Air suction canvas" are optional accessories.
Number | Name | Description
1 | Liquid pipe connection | ø3/8 flare connection
2 | Gas pipe connection | ø5/8 flare connection
3 | Drain pipe connection | VP25(O.D. ø1-1/4 I.D. ø1)
4 | Interunit wiring port |
5 | Power wiring port |
6 | Drain hole | VP25(O.D. ø1-1/4 I.D. ø1)
7 | Air filter |
*The required ceiling depth varies according to configuration of specific system.
Required installation space
16-3/4 or more
Suction air intake position when installing the duct (Note 3)
B View
C View
A View
Position of Natural evaporating pan type humidifier (Note 2)
Fresh air intake position
P.C.D ø6-5/16
ø4-15/16 (Knockout hole)
6-M5 hole (Circumference)
18-M5 hole
Suspension bolt 4-M8~M10
(Ceiling opening)
(Service space)
(Suspension position)
41-3/4 (Ceiling opening)
41-3/8 (Suspension position)
43-2/8

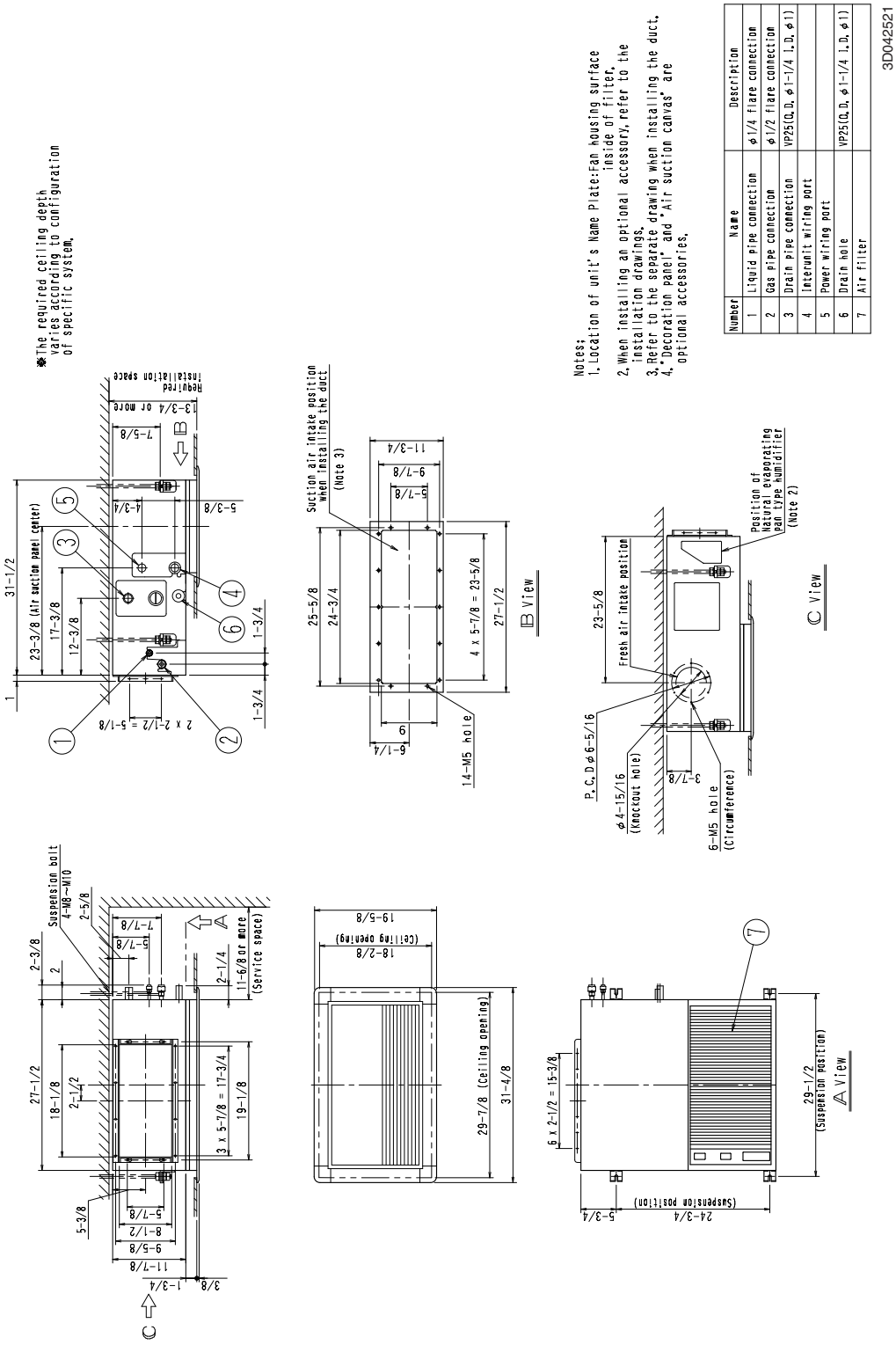
FXSQ30MVJU + BYBS125DJW1 (with Decoration Panel and Air Suction Canvas)
FXSQ36MVJU + BYBS125DJW1 (with Decoration Panel and Air Suction Canvas)
FXSQ48MVJU + BYBS125DJW1 (with Decoration Panel and Air Suction Canvas)



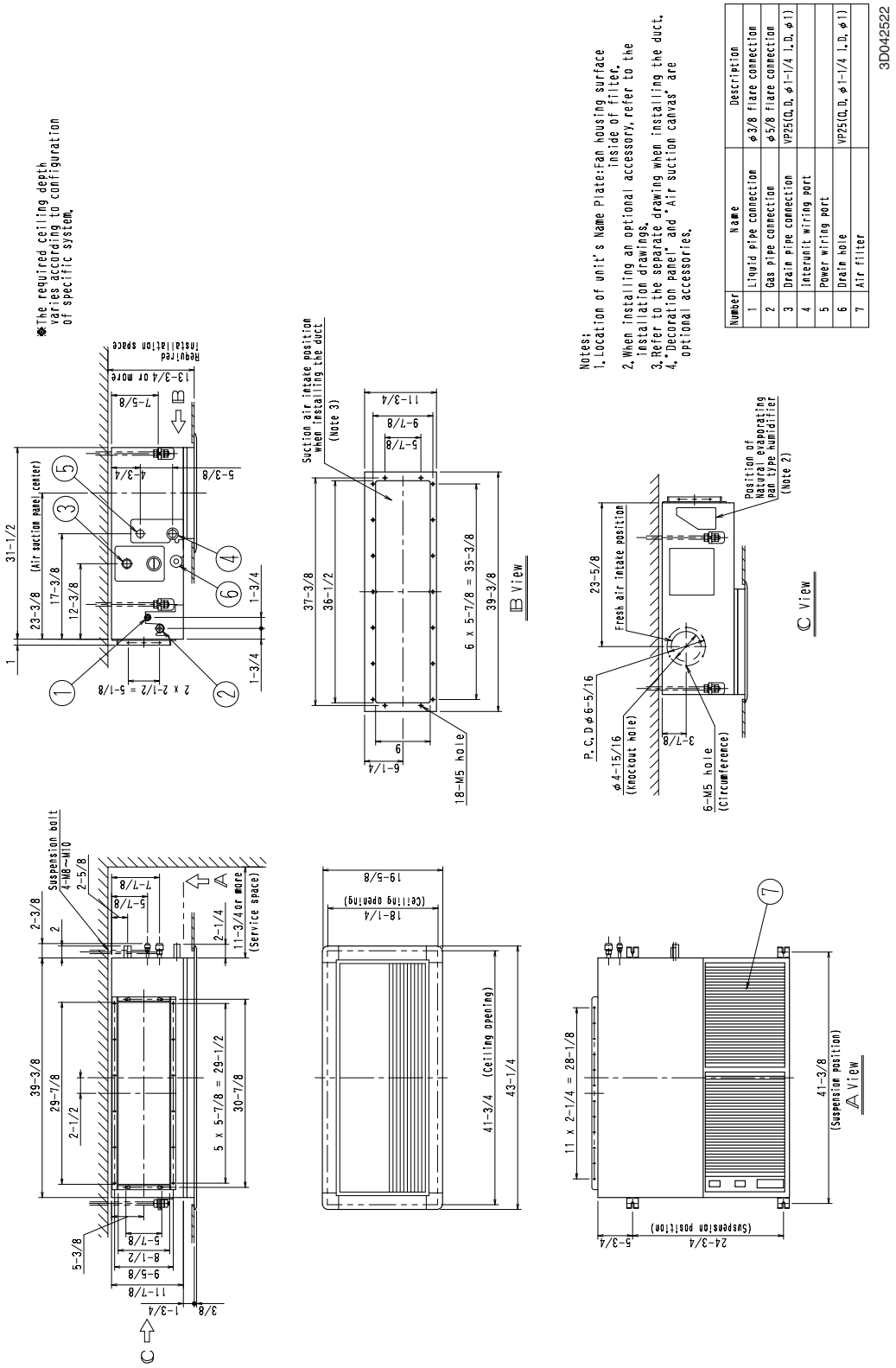
FXSQ12MVJU


Notes:
1. Location of unit's Name Plate:Fan housing surface inside of filter.
2. When installing an optional accessory, refer to the installation drawings.
3. Refer to the separate drawing when installing the duct.
4. "Decoration panel" and "Air suction canvas" are optional accessories.
3D042520
Number | Name | Description
1 | Liquid pipe connection | ø1/4 flare connection
2 | Gas pipe connection | ø1/2 flare connection
3 | Drain pipe connection | VP25(O.D. ø1-1/4 I.D. ø1)
4 | Interunit wiring port
5 | Power wiring port
6 | Drain hole | VP25(O.D. ø1-1/4 I.D. ø1)
7 | Air filter
*The required ceiling depth varies according to configuration of specific system.
Required installation space
13-3/4 or more
31-1/2
23-3/8 (Air suction panel center)
17-3/8
12-3/8
2 x 2-1/2 = 5-1/8
1-3/4
1-3/4
7-5/8
4-3/4
5-3/8
Suction air intake position when installing the duct (Note 3)
19-5/8
18-3/4
11-3/4
9-7/8
5-7/8
3 x 5-7/8 = 17-3/4
21-5/8
6-1/4
9
12-M5 hole
B View
23-5/8
Fresh air intake position
Position of Natural evaporating pan type humidifier (Note 2)
P, C, D ø6-5/16
ø4-15/16 (Knockout hole)
3-7/8
6-M5 hole (Circumference)
C View
Suspension bolt 4-M8~M10
2-3/8
2
2-5/8
7-7/8
5-7/8
2-1/4
11-3/4 or more (Service space)
21-5/8
12-1/4
2-1/2
2 x 5-7/8 = 11-3/4
13-1/4
5-3/8
8-1/2
5-7/8
9-5/8
11-7/8
1-3/4
3/8
A
C
19-5/8
(Ceiling opening)
18-1/4
24 (Ceiling opening)
25-5/8
4 x 2-1/2 = 10-1/4
5-3/4
(Suspension position)
24-3/4
23-5/8
(Suspension position)
A View

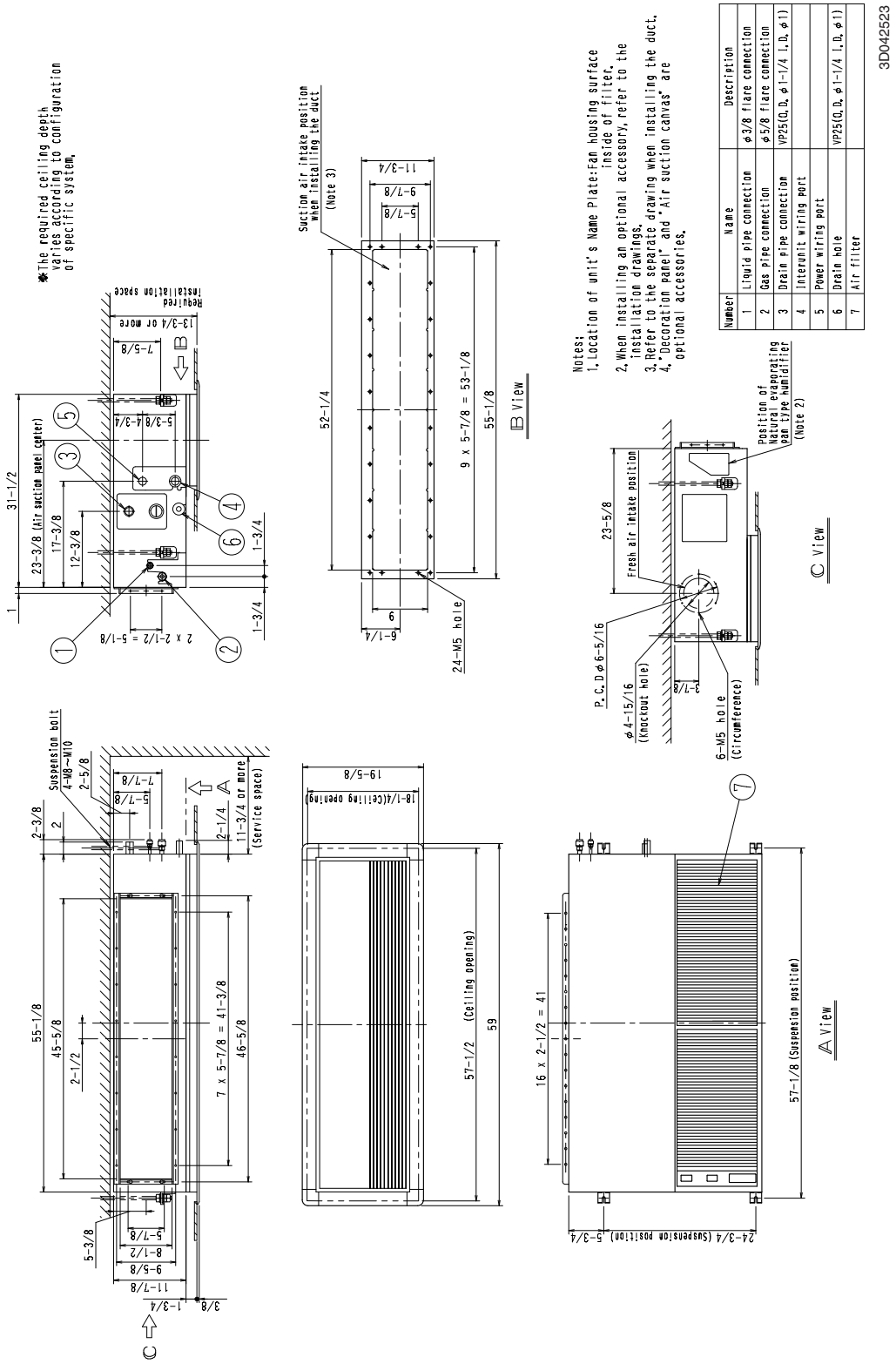
FXSQ18MVJU


✱The required ceiling depth varies according to configuration of specific system.
Required installation space
13-3/4 or more
7-5/8
5-3/8
4-3/4
31-1/2
23-3/8 (Air suction panel center)
17-3/8
12-3/8
1-3/4
1-3/4
2 x 2-1/2 = 5-1/8
Suction air intake position when installing the duct (Note 3)
11-3/4
9-7/8
5-7/8
25-5/8
24-3/4
4 x 5-7/8 = 23-5/8
27-1/2
6-1/4
9
14-M5 hole
B View
Notes:
1. Location of unit's Name Plate:Fan housing surface inside of filter.
2. When installing an optional accessory, refer to the installation drawings.
3. Refer to the separate drawing when installing the duct.
4. "Decoration panel" and "Air suction canvas" are optional accessories.
Number | Name | Description
1 | Liquid pipe connection | ø1/4 flare connection
2 | Gas pipe connection | ø1/2 flare connection
3 | Drain pipe connection | VP25(O.D. ø1-1/4 I.D. ø1)
4 | Intercnnit wiring port
5 | Power wiring port
6 | Drain hole | VP25(O.D. ø1-1/4 I.D. ø1)
7 | Air filter
23-5/8
Fresh air intake position
Position of Natural evaporating pan type humidifier (Note 2)
P.C.D ø6-5/16
ø4-15/16 (Knockout hole)
3-7/8
6-M5 hole (Circumference)
C View
3D042521
Suspension bolt 4-M8~M10
2-5/8
7-7/8
5-7/8
2-3/8
2
2-1/4
11-6/8 or more (Service space)
27-1/2
18-1/8
2-1/2
3 x 5-7/8 = 17-3/4
19-1/8
5-3/8
8-1/2
9-5/8
11-7/8
1-3/4
3/8
C
19-5/8
(Ceiling opening)
18-2/8
29-7/8 (Ceiling opening)
31-4/8
7
6 x 2-1/2 = 15-3/8
29-1/2 (Suspension position)
24-3/4
5-3/4
(Suspension position)
A View

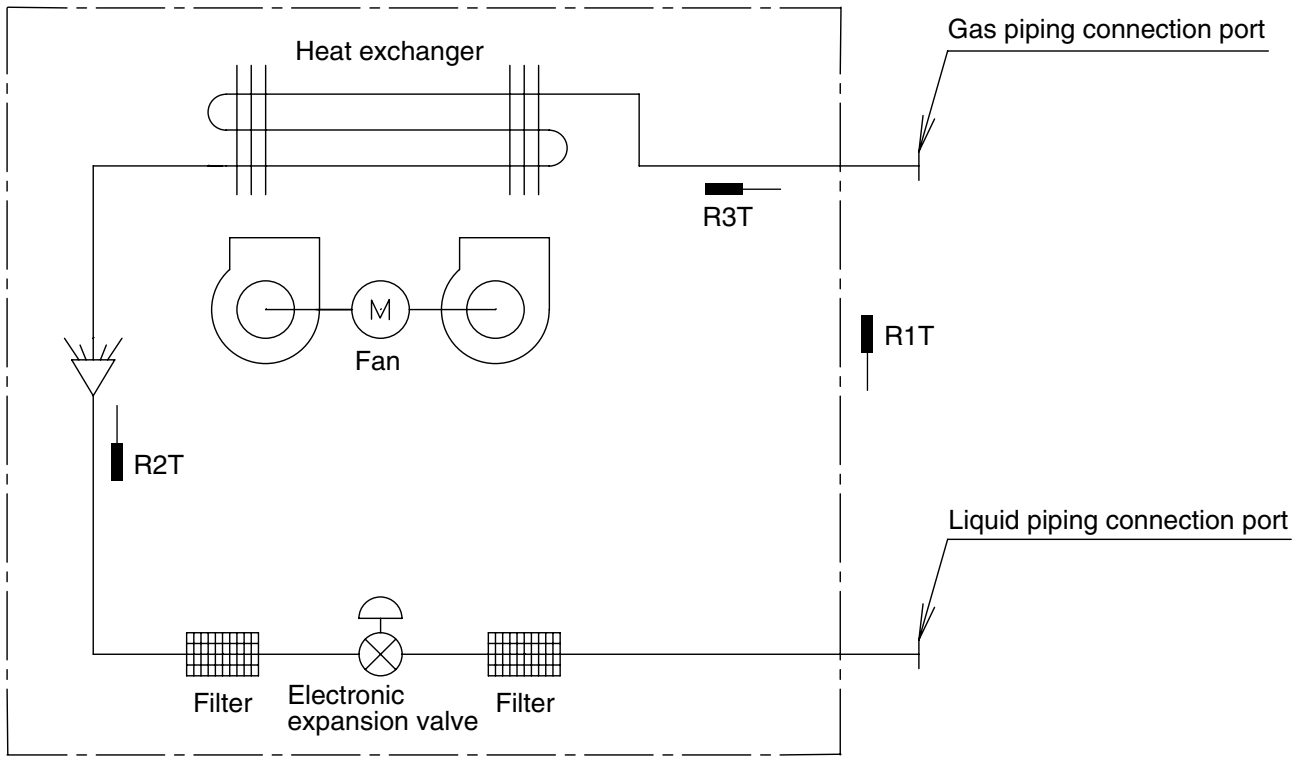
FXSQ24MVJU


✽The required ceiling depth varies according to configuration of specific system.
Required installation space
13-3/4 or more
7-5/8
(Air suction panel center)
31-1/2
23-3/8
17-3/8
12-3/8
4-3/4
5-3/8
1-3/4
2 x 2-1/2 = 5-1/8
Suction air intake position When installing the duct (Note 3)
37-3/8
36-1/2
11-3/4
9-7/8
5-7/8
6 x 5-7/8 = 35-3/8
39-3/8
9
6-1/4
18-M5 hole
B View
Notes:
1. Location of unit's Name Plate:Fan housing surface inside of filter.
2. When installing an optional accessory, refer to the installation drawings.
3. Refer to the separate drawing when installing the duct.
4. "Decoration panel" and "Air suction canvas" are optional accessories.
Number | Name | Description
1 | Liquid pipe connection | ø3/8 flare connection
2 | Gas pipe connection | ø5/8 flare connection
3 | Drain pipe connection | VP25(O.D. ø1-1/4 I.D. ø1)
4 | Interunit wiring port
5 | Power wiring port
6 | Drain hole | VP25(O.D. ø1-1/4 I.D. ø1)
7 | Air filter
3D042522
23-5/8
Fresh air intake position
Position of Natural Evaporating pan type humidifier (Note 2)
P.C.D ø6-5/16
ø4-15/16 (Knockout hole)
3-7/8
6-M5 hole (Circumference)
C View
Suspension bolt 4-M8~M10
2-5/8
7-7/8
5-7/8
2-3/8
2
2-1/4
11-3/4 or more (Service space)
39-3/8
29-7/8
2-1/2
5 x 5-7/8 = 29-1/2
30-7/8
5-3/8
8-1/2
9-5/8
11-7/8
1-3/4
3/8
C
19-5/8
18-1/4 (Ceiling opening)
41-3/4 (Ceiling opening)
43-1/4
7
11 x 2-1/4 = 28-1/8
41-3/8 (Suspension position)
A View
(Suspension position)
24-3/4
5-3/4

FXSQ30MVJU
FXSQ36MVJU
FXSQ48MVJU



4. Piping Diagrams



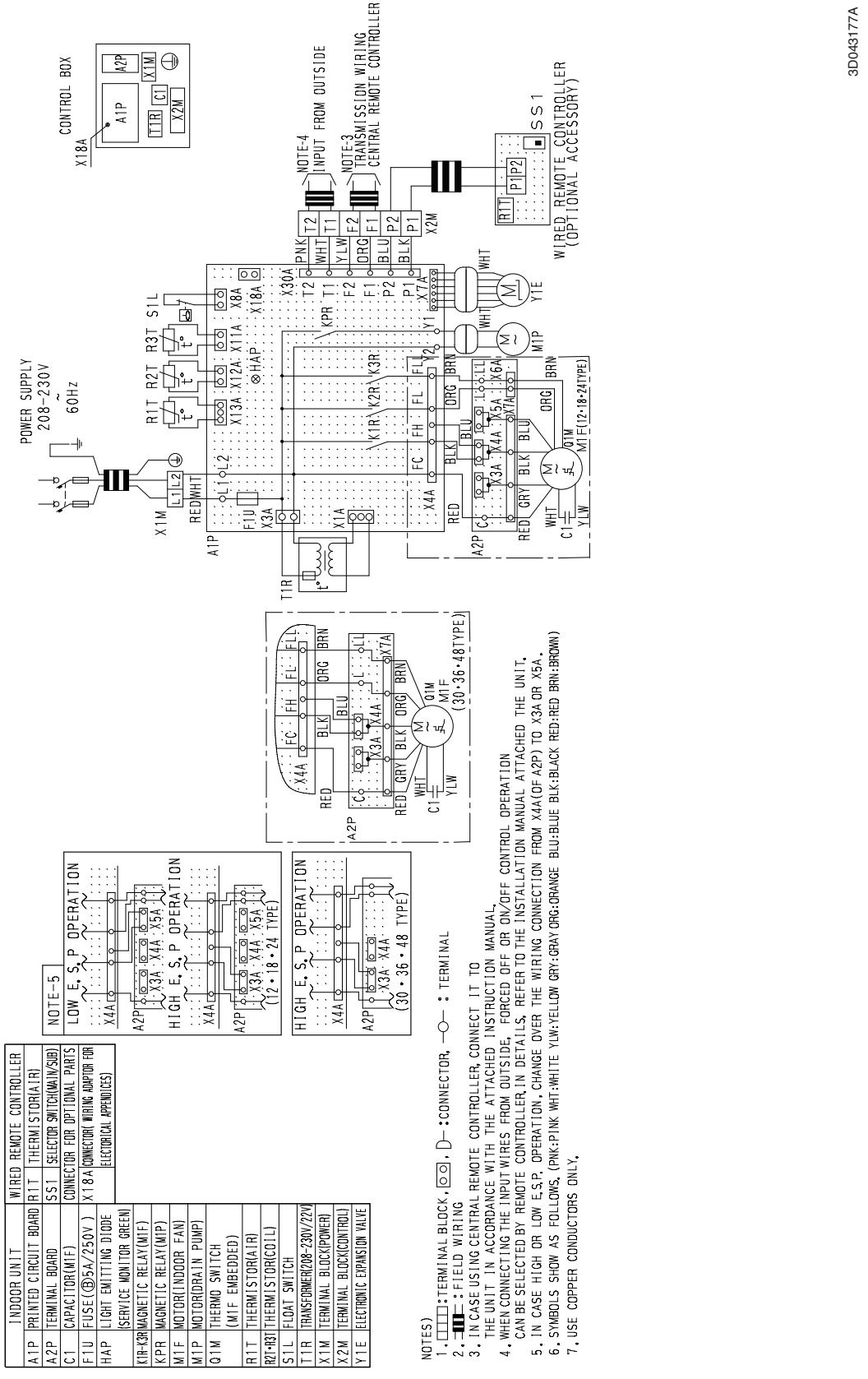
C:4D034245C

R1T : Thermistor for suction air temperature
R2T : Thermistor for liquid line temperature
R3T : Thermistor for gas line temperature

Capacity	Gas	Liquid
12/18M	ϕ1/2	ϕ1/4
24/30/36/48M	ϕ5/8	ϕ3/8

5. Wiring Diagrams

FXSQ12M/18M/24M/30M/36M/48MVJU


3D043177A
INDOOR UNIT
A1P PRINTED CIRCUIT BOARD
A2P TERMINAL BOARD
C1 CAPACITOR(M1F)
F1U FUSE(Ⓑ5A/250V)
HAP LIGHT EMITTING DIODE (SERVICE MONITOR GREEN)
K1R-K3R MAGNETIC RELAY(M1F)
KPR MAGNETIC RELAY(M1P)
M1F MOTOR(INDOOR FAN)
M1P MOTOR(DRAIN PUMP)
Q1M THERMO SWITCH (M1F EMBEDDED)
R1T THERMISTOR(AIR)
R2T-R3T THERMISTOR(COIL)
S1L FLOAT SWITCH
T1R TRANSFORMER(208-230V/22V)
X1M TERMINAL BLOCK(POWER)
X2M TERMINAL BLOCK(CONTROL)
Y1E ELECTRONIC EXPANSION VALVE
WIRED REMOTE CONTROLLER
R1T THERMISTOR(AIR)
SS1 SELECTOR SWITCH(MAIN/SUB)
X18A CONNECTOR(WIRING ADAPTOR FOR ELECTRICAL APPENDICES)
CONNECTOR FOR OPTIONAL PARTS
NOTE-5
LOW E.S.P OPERATION
HIGH E.S.P OPERATION (12・18・24 TYPE)
HIGH E.S.P OPERATION (30・36・48 TYPE)
(30・36・48TYPE)
NOTES)
1. : TERMINAL BLOCK, : CONNECTOR, : TERMINAL
2. : FIELD WIRING
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
4. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER.IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.
5. IN CASE HIGH OR LOW E.S.P. OPERATION, CHANGE OVER THE WIRING CONNECTION FROM X4A(OF A2P) TO X3A OR X5A.
6. SYMBOLS SHOW AS FOLLOWS, (PNK:PINK WHT:WHITE YLW:YELLOW GRY:GRAY ORG:ORANGE BLU:BLUE BLK:BLACK RED:RED BRN:BROWN)
7. USE COPPER CONDUCTORS ONLY.
POWER SUPPLY 208-230V ~ 60Hz
CONTROL BOX
NOTE-4 INPUT FROM OUTSIDE
NOTE-3 TRANSMISSION WIRING CENTRAL REMOTE CONTROLLER
WIRED REMOTE CONTROLLER (OPTIONAL ACCESSORY)

6. Electric Characteristics

Units					Power supply		IFM		Input(W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXSQ12M	VJ	60	208-230	MAX. 253 Min. 187	0.7	15	0.05	0.6	136	116
FXSQ18M					1.0	15	0.085	0.8	200	180
FXSQ24M					1.4	15	0.125	1.1	254	234
FXSQ30M					1.8	15	0.225	1.4	315	295
FXSQ36M					1.8	15	0.225	1.5	326	306
FXSQ48M					2.4	15	0.225	2.0	435	415

Note:

1. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,
2. Maximum allowable voltage unbalance between phases is 2%.
3. MCA/MFA
   MCA = 1.25 X FLA
   MFA ≦ 4 X FLA
   (Next lower standard fuse rating. Min.15A)
4. Select wire size based on the MCA.
5. Instead of fuse, use Circuit Breaker.

Symbols:

MCA : Min. Circuit Amps (A)
MFA : Max. Fuse Amps (See note 5)
KW : Fan Motor Rated Output(KW)
FLA : Full Load Amps(A)
IFM : Indoor Fan Motor

C:4D042529

7. Capacity Tables

7.1 Cooling Capacity

FXSQ-M

Cooling capacity

Unit size	Outdoor air temp.	Indoor Air Temp. °FWB											
		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
	°FDB	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh
12	75	9.5	7.4	10.7	8.0	12.0	8.5	13.3	8.8	14.0	9.0	14.3	8.6
	79	9.5	7.4	10.7	8.0	12.0	8.5	13.3	8.8	13.8	8.9	14.0	8.5
	83	9.5	7.4	10.7	8.0	12.0	8.5	13.3	8.8	13.6	8.8	13.8	8.4
	87	9.5	7.4	10.7	8.0	12.0	8.5	13.2	8.8	13.3	8.7	13.6	8.4
	91	9.5	7.4	10.7	8.0	12.0	8.5	13.0	8.8	13.1	8.5	13.4	8.3
	95	9.5	7.4	10.7	8.0	12.0	8.5	12.7	8.8	12.9	8.4	13.1	8.2
	99	9.5	7.4	10.7	8.0	12.0	8.5	12.5	8.7	12.7	8.4	12.9	8.1
	103	9.5	7.4	10.7	8.0	12.0	8.5	12.3	8.6	12.4	8.2	12.7	8.0
18	75	14.2	11.4	16.1	12.0	18.0	12.7	19.9	13.3	21.0	13.5	21.4	12.9
	79	14.2	11.4	16.1	12.0	18.0	12.7	19.9	13.3	20.7	13.2	21.1	12.7
	83	14.2	11.4	16.1	12.0	18.0	12.7	19.9	13.3	20.4	13.0	20.7	12.6
	87	14.2	11.4	16.1	12.0	18.0	12.7	19.8	13.2	20.0	12.8	20.4	12.4
	91	14.2	11.4	16.1	12.0	18.0	12.7	19.4	13.2	19.7	12.6	20.1	12.3
	95	14.2	11.4	16.1	12.0	18.0	12.7	19.1	13.2	19.3	12.4	19.7	12.2
	99	14.2	11.4	16.1	12.0	18.0	12.7	18.8	13.1	19.0	12.2	19.4	12.1
	103	14.2	11.4	16.1	12.0	18.0	12.7	18.4	13.1	18.7	11.9	19.0	12.0
24	75	18.9	15.3	21.5	16.4	24.0	17.3	26.5	18.0	28.0	18.3	28.5	17.4
	79	18.9	15.3	21.5	16.4	24.0	17.3	26.5	18.0	27.6	18.1	28.1	17.2
	83	18.9	15.3	21.5	16.4	24.0	17.3	26.5	18.0	27.1	17.9	27.6	17.1
	87	18.9	15.3	21.5	16.4	24.0	17.3	26.4	17.9	26.7	17.9	27.2	16.9
	91	18.9	15.3	21.5	16.4	24.0	17.3	25.9	17.9	26.2	17.7	26.7	16.7
	95	18.9	15.3	21.5	16.4	24.0	17.3	25.5	17.8	25.8	17.5	26.3	16.6
	99	18.9	15.3	21.5	16.4	24.0	17.3	25.0	17.8	25.3	17.4	25.8	16.4
	103	18.9	15.3	21.5	16.4	24.0	17.3	24.6	17.7	24.9	17.2	25.4	16.2
30	75	23.7	18.4	26.8	19.7	30.0	20.9	33.2	21.7	35.1	22.0	35.7	20.9
	79	23.7	18.4	26.8	19.7	30.0	20.9	33.2	21.7	34.5	21.8	35.1	20.8
	83	23.7	18.4	26.8	19.7	30.0	20.9	33.2	21.7	33.9	21.6	34.5	20.6
	87	23.7	18.4	26.8	19.7	30.0	20.9	33.0	21.7	33.4	21.4	34.0	20.4
	91	23.7	18.4	26.8	19.7	30.0	20.9	32.4	21.7	32.8	21.2	33.4	20.2
	95	23.7	18.4	26.8	19.7	30.0	20.9	31.8	21.6	32.2	21.0	32.9	20.0
	99	23.7	18.4	26.8	19.7	30.0	20.9	31.3	21.6	31.7	20.7	32.3	19.9
	103	23.7	18.4	26.8	19.7	30.0	20.9	30.7	21.6	31.1	20.5	31.7	19.7
36	75	28.4	22.0	32.2	23.7	36.0	25.0	39.8	26.1	42.1	26.4	42.8	25.2
	79	28.4	22.0	32.2	23.7	36.0	25.0	39.8	26.1	41.4	26.2	42.1	24.9
	83	28.4	22.0	32.2	23.7	36.0	25.0	39.8	26.1	40.7	25.9	41.5	24.6
	87	28.4	22.0	32.2	23.7	36.0	25.0	39.5	26.5	40.0	25.6	40.8	24.3
	91	28.4	22.0	32.2	23.7	36.0	25.0	38.9	26.4	39.4	25.4	40.1	23.9
	95	28.4	22.0	32.2	23.7	36.0	25.0	38.2	26.4	38.7	25.1	39.4	23.7
	99	28.4	22.0	32.2	23.7	36.0	25.0	37.5	26.3	38.0	24.9	38.8	23.4
	103	28.4	22.0	32.2	23.7	36.0	25.0	36.8	26.2	37.3	24.6	38.1	23.2
48	75	37.9	29.4	42.9	31.7	48.0	33.6	53.1	35.1	56.1	35.7	57.1	34.1
	79	37.9	29.4	42.9	31.7	48.0	33.6	53.1	35.1	55.2	35.5	56.2	33.7
	83	37.9	29.4	42.9	31.7	48.0	33.6	53.1	35.1	54.3	35.1	55.3	33.2
	87	37.9	29.4	42.9	31.7	48.0	33.6	52.7	35.1	53.4	34.7	54.4	32.7
	91	37.9	29.4	42.9	31.7	48.0	33.6	51.8	34.7	52.5	34.2	53.5	32.4
	95	37.9	29.4	42.9	31.7	48.0	33.6	50.9	34.6	51.6	33.8	52.6	32.0
	99	37.9	29.4	42.9	31.7	48.0	33.6	50.0	34.3	50.7	33.3	51.7	31.5
	103	37.9	29.4	42.9	31.7	48.0	33.6	49.1	33.9	49.8	32.9	50.8	31.0

TC : Total capacity ; kW
SHC : Sensible heat capacity ; kW

Refer to Outdoor Unit Capacity Tables for the actual performance data of each indoor and outdoor unit combination.

7.2 Heating Capacity

FXSQ-M

Heating Capacity

Indoor unit	Outdoor Air Temp.		Indoor Air Temp. °FDB					
			62	65	68	70	72	75
			TC	TC	TC	TC	TC	TC
	°FDB	°FWB	MBh	MBh	MBh	MBh	MBh	MBh
12	22.0	20.0	11.7	11.7	11.6	11.6	11.6	11.6
	26.0	24.0	12.2	12.2	12.2	12.2	12.2	12.1
	30.0	28.0	12.8	12.8	12.7	12.7	12.7	12.3
	35.0	32.0	13.3	13.3	13.3	13.3	13.0	12.3
	39.0	36.0	13.9	13.9	13.9	13.5	13.0	12.3
	44.0	40.0	14.5	14.4	14.0	13.5	13.0	12.3
	47.0	43.0	14.9	14.7	14.0	13.5	13.0	12.3
	51.0	47.0	15.4	14.7	14.0	13.5	13.0	12.3
	54.0	50.0	15.5	14.7	14.0	13.5	13.0	12.3
	57.0	53.0	15.5	14.7	14.0	13.5	13.0	12.3
	60.0	56.0	15.5	14.7	14.0	13.5	13.0	12.3
18	22.0	20.0	17.5	17.5	17.4	17.4	17.4	17.4
	26.0	24.0	18.3	18.3	18.3	18.3	18.2	18.2
	30.0	28.0	19.2	19.1	19.1	19.1	19.1	18.4
	35.0	32.0	20.0	20.0	19.9	19.9	19.5	18.4
	39.0	36.0	20.8	20.8	20.8	20.0	19.5	18.4
	44.0	40.0	21.7	21.6	21.0	20.0	19.5	18.4
	47.0	43.0	22.3	22.1	21.0	20.0	19.5	18.4
	51.0	47.0	23.1	22.1	21.0	20.0	19.5	18.4
	54.0	50.0	23.2	22.1	21.0	20.0	19.5	18.4
	57.0	53.0	23.2	22.1	21.0	20.0	19.5	18.4
	60.0	56.0	23.2	22.1	21.0	20.0	19.5	18.4
24	22.0	20.0	23.3	23.3	23.3	23.2	23.2	23.2
	26.0	24.0	24.5	24.4	24.4	24.3	24.3	24.3
	30.0	28.0	25.6	25.5	25.5	25.5	25.4	24.5
	35.0	32.0	26.7	26.6	26.6	26.6	26.0	24.5
	39.0	36.0	27.8	27.7	27.7	27.0	26.0	24.5
	44.0	40.0	28.9	28.9	28.0	27.0	26.0	24.5
	47.0	43.0	29.7	29.5	28.0	27.0	26.0	24.5
	51.0	47.0	30.8	29.5	28.0	27.0	26.0	24.5
	54.0	50.0	31.0	29.5	28.0	27.0	26.0	24.5
	57.0	53.0	31.0	29.5	28.0	27.0	26.0	24.5
	60.0	56.0	31.0	29.5	28.0	27.0	26.0	24.5

Refer to Outdoor Unit Capacity Tables for the actual performance data of each indoor and outdoor unit combination.

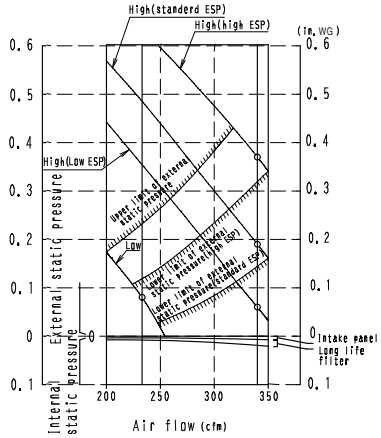
Heating Capacity

Indoor unit	Outdoor Air Temp.		Indoor Air Temp. °FDB					
			62	65	68	70	72	75
			TC	TC	TC	TC	TC	TC
	°FDB	°FWB	MBh	MBh	MBh	MBh	MBh	MBh
30	22.0	20.0	29.2	29.1	29.1	29.0	29.0	28.9
	26.0	24.0	30.6	30.5	30.5	30.4	30.4	30.3
	30.0	28.0	32.0	31.9	31.9	31.8	31.8	30.6
	35.0	32.0	33.3	33.3	33.2	33.2	32.5	30.6
	39.0	36.0	34.7	34.7	34.6	34.0	32.5	30.6
	44.0	40.0	36.1	36.1	35.0	34.0	32.5	30.6
	47.0	43.0	37.2	36.9	35.0	34.0	32.5	30.6
	51.0	47.0	38.6	36.9	35.0	34.0	32.5	30.6
	54.0	50.0	38.7	36.9	35.0	34.0	32.5	30.6
	57.0	53.0	38.7	36.9	35.0	34.0	32.5	30.6
	60.0	56.0	38.7	36.9	35.0	34.0	32.5	30.6
36	22.0	20.0	35.0	35.0	34.9	34.8	34.8	34.7
	26.0	24.0	36.7	36.6	36.6	36.5	36.5	36.4
	30.0	28.0	38.4	38.3	38.2	38.2	38.1	36.8
	35.0	32.0	40.0	40.0	39.9	39.8	39.0	36.8
	39.0	36.0	41.7	41.6	41.6	40.0	39.0	36.8
	44.0	40.0	43.4	43.3	42.0	40.0	39.0	36.8
	47.0	43.0	44.6	44.2	42.0	40.0	39.0	36.8
	51.0	47.0	46.3	44.2	42.0	40.0	39.0	36.8
	54.0	50.0	46.5	44.2	42.0	40.0	39.0	36.8
	57.0	53.0	46.5	44.2	42.0	40.0	39.0	36.8
	60.0	56.0	46.5	44.2	42.0	40.0	39.0	36.8
48	22.0	20.0	46.7	46.6	46.5	46.5	46.4	46.3
	26.0	24.0	48.9	48.8	48.7	48.7	48.6	48.5
	30.0	28.0	51.1	51.1	51.0	50.9	50.8	49.0
	35.0	32.0	53.4	53.3	53.2	53.1	52.0	49.0
	39.0	36.0	55.6	55.5	55.4	54.0	52.0	49.0
	44.0	40.0	57.8	57.7	56.0	54.0	52.0	49.0
	47.0	43.0	59.5	59.0	56.0	54.0	52.0	49.0
	51.0	47.0	61.7	59.0	56.0	54.0	52.0	49.0
	54.0	50.0	62.0	59.0	56.0	54.0	52.0	49.0
	57.0	53.0	62.0	59.0	56.0	54.0	52.0	49.0
	60.0	56.0	62.0	59.0	56.0	54.0	52.0	49.0

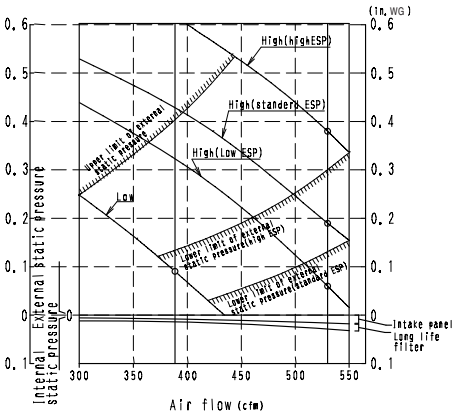
Refer to Outdoor Unit Capacity Tables for the actual performance data of each indoor and outdoor unit combination.

8. Fan Performances

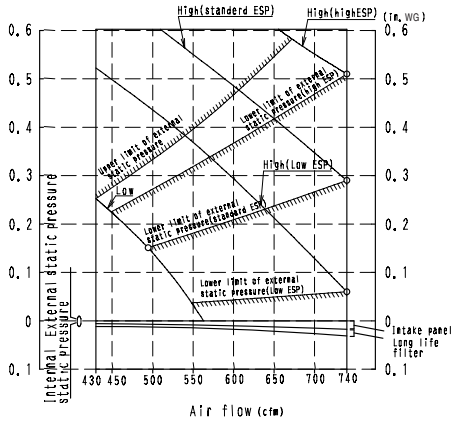
FXSQ12MVJU



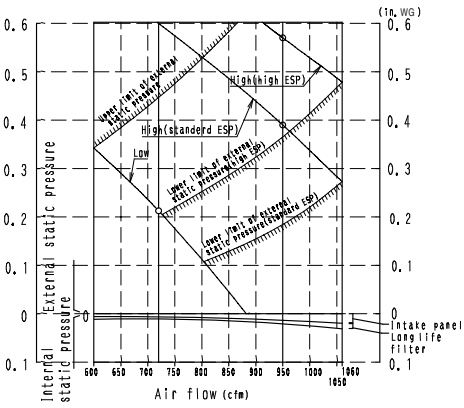
FXSQ18MVJU



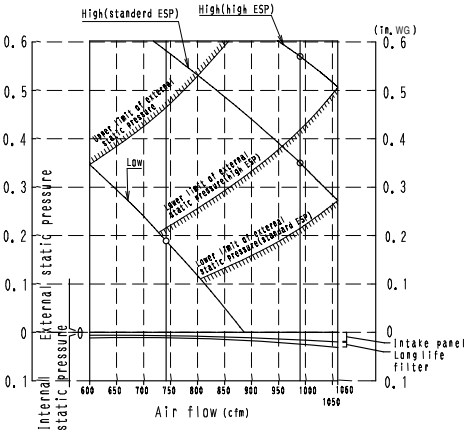
FXSQ24MVJU



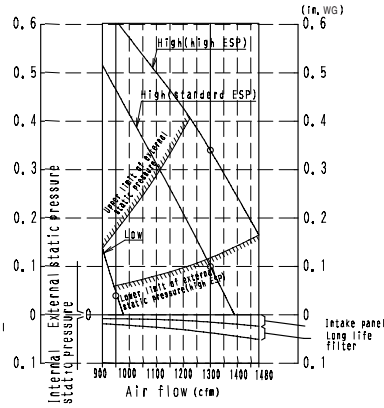
FXSQ30MVJU



FXSQ36MVJU



FXSQ48MVJU



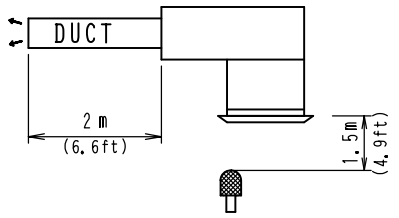
Note:

1. The remote controller can be used to switch between **HIGH** and **LOW**.
2. The airflow is set to **STANDARD** before leaving the factory. It is possible to switch between **STANDARD ESP** and **HIGH ESP** by changing the terminals in the indoor unit electrical box.
3. The external static pressure indicates the characteristics of the fan when an optional suction panel and its canvas are incorporated into the main unit with a long-life filter.

9. Sound Levels

Overall

■ **Ceiling Mounted Built-In Type**



Notes:
Operation noise differs with operation and ambient conditions.

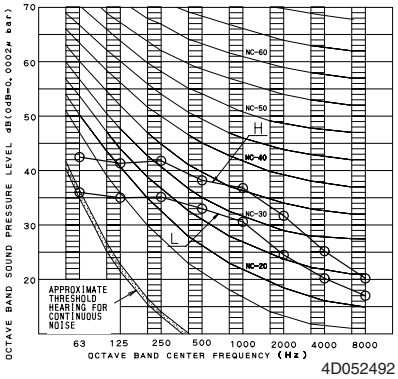
dBA

Model	208~230V, 60Hz	
	H	L
FXSQ12MVJU	41	35
FXSQ18MVJU	44	38
FXSQ24MVJU	44	38
FXSQ30MVJU	45	39
FXSQ36MVJU	45	39
FXSQ48MVJU	48	43

Octave Band Level

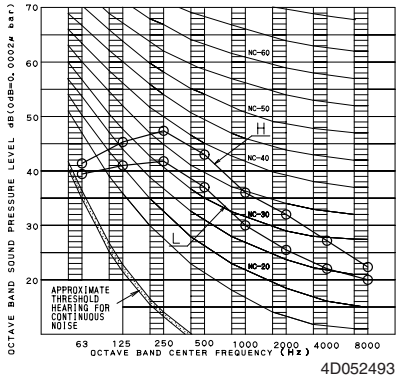
○——○ 208V~230V

FXSQ12MVJU



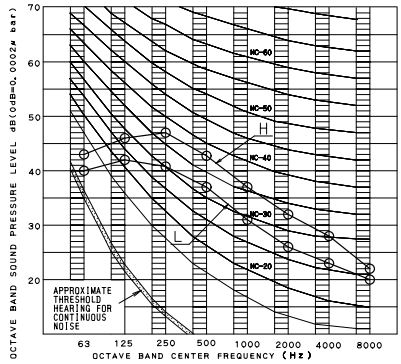
4D052492

FXSQ18MVJU



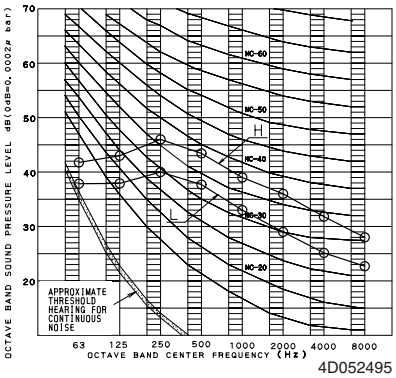
4D052493

FXSQ24MVJU



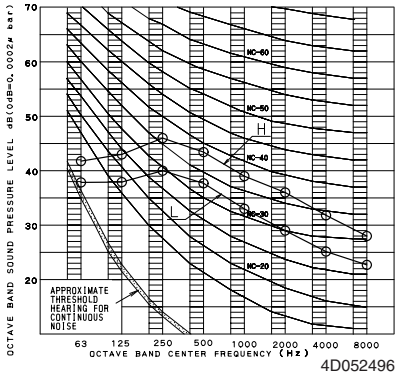
4D052494

FXSQ30MVJU



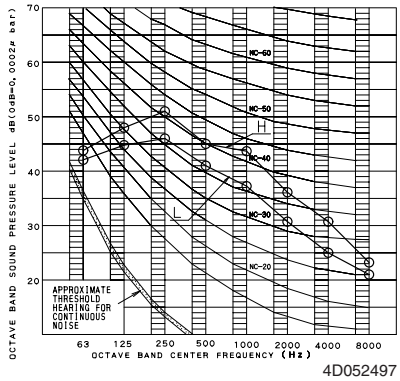
4D052495

FXSQ36MVJU



4D052496

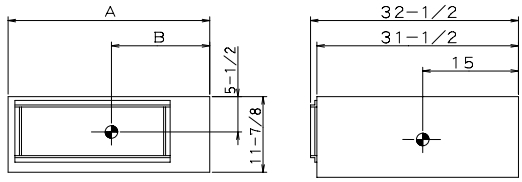
FXSQ48MVJU



4D052497

10. Installation

Center of Gravity



MODEL	A	B
FXSQ12MVJU	21-5/8	9-7/8
FXSQ18MVJU	27-1/2	11-3/4
FXSQ24MVJU	39-3/8	18-1/8
FXSQ30, 36, 48MVJU	55-1/8	25-1/4

4D042534

1. SAFETY CONSIDERATIONS

Read these ***SAFETY CONSIDERATIONS*** carefully before installing air conditioning equipment, and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.

Instruct the customer how to operate and maintain the unit.

Inform customers that they should store this Installation Manual with the Operation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.

Meanings of DANGER, WARNING, CAUTION, and NOTE symbols:

⚠ **DANGER** ..... Indicates an imminently hazardous situation which,if not avoided, will result in death or serious injury.

⚠ **WARNING** ..... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ..... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.

⚠ **NOTE** ..... Indicates situation that may result in equipment or property-damage-only accidents.

⚠ DANGER

- **Refrigerant gas is heavier than air and displaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.**
- **Do not install unit in an area where flammable materials are present due to risk of explosions resulting in serious injury or death.**
- **Any abnormalities in the operation of the air conditioner, such as smoke or fire, can result in severe injury or death. Turn off the power and contact your dealer immediately for instructions. If the refrigerant gas leaks during installation, ventilate the area immediately.**
  Refrigerant gas may produce toxic gas if it comes in contact with fire such as from a fan, heater, stove or cooking device. Exposure to this gas could cause severe injury or death.
- **After completing the installation work, check that the refrigerant gas does not leak.**
  Refrigerant gas may produce toxic gas if it comes in contact with fire from a fan, heater, stove, cooking device, or other heat source. Exposure to this gas can cause severe injury or death.
- **Do not ground units to water pipes, telephone wires, or lightning rods because incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Do not ground units to gas pipes because a gas leak can result in an explosion which could lead to severe injury or death.**Tear apart and throw away plastic packaging bags so that children cannot play with them. **Children playing with plastic bags face the danger of death by suffocation.**
- **Safely dispose of the packing materials.**

⚠ WARNING

- Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. **Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
  Improper installation can lead to leaks and, in worst cases, electric shock, or fire.
- **Perform installation work in accordance with this installation manual.**
  Improper installation may result in water leakage, electric shocks, or fire.
- **Be sure to use only the specified accessories and parts for installation work.**
  Failure to use the specified parts may result in water leakage, electric shocks, fire, or the unit falling.
- **Check the unit stand for damage on a continual basis, especially if it has been used for a long time.**
  If left in a damaged condition, the unit may fall and cause injury.

- **Do not touch the air outlet or the horizontal flaps while the swing flap is in operation as fingers may get caught and injured.**
- **Install the air conditioner on a foundation strong enough to withstand the weight of the unit.**
  A foundation of insufficient strength may result in the equipment falling and causing injuries.
- **Carry out the specified installation work after taking into account strong winds, typhoons, or earthquakes.**
  Improper installation work may result in the equipment falling and causing accidents.
- **Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations, and this installation manual.**
  An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
- **Make sure that all wiring is secured, the specified wires are used, and that no external forces act on the terminal connections or wires.**
  Improper connections or installation may result in fire.
- **When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
  Improper positioning of the electric parts box lid may result in electric shocks, fire, or the terminals overheating.
- **Before touching electrical parts, turn off the unit.**
- **Be sure to establish a ground.**
  Do not ground the unit to a utility pipe, arrester, or telephone ground.
  Incomplete ground may cause electrical shock, or fire.
  A high surge current from lightning or other sources may cause damage to the air conditioner.
- **Do not touch the switch with wet fingers.**
  Touching a switch with wet fingers can cause electric shock.
- **Be sure to install a ground leakage breaker.**
  Failure to install a ground leakage breaker may result in electric shocks, or fire.
- **Do not install the air conditioner in the following locations:**
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves
  Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
- **Heat exchanger fins are sharp enough to cut.**
  To avoid injury wear gloves or cover the fins when working around them.
- **Use of unspecified parts can lead to the unit falling, leaks and, in worse cases, electric shock or fire.**
- **Do not allow children to play on or around the unit as they could be injured.**
- **Placing a flower vase or other containers with water or other liquids can result in a shock hazard or fire if a spill occurs.**
- **Do not remove the front panel because some parts are dangerous to touch. In addition, some parts may be damaged.** For checking and adjusting internal parts, contact your dealer.
- **Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and injury can result.**
- **Do not let the indoor unit get wet as it may cause an electric shock or fire.**
- **Refrigerant gas may produce toxic gas if it comes in contact with fire such as from a fan, heater, stove, or cooking device.** Exposure to this gas can cause severe injury or death.
- **Entrust installation to the place of purchase or a qualified serviceman.**
  Improper installation can lead to result in leaks and even electric shock or fire.
- **Refrigerant pipes may be very hot or very cold during or immediately after operation.**
  Touching them could result in burns or frostbite. To avoid injury give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- **While following the instructions in this installation manual, install drain piping in order to ensure proper drainage and insulate piping in order to prevent condensation.**
- **Improper drain piping may result in water leakage and property damage.**
- **Be very careful about product transportation.** Some products use PP bands for packaging. Do not use any PP bands for a means of transportation. It is dangerous.
- **Do not turn off the power immediately after stopping operation.**
  Always wait at least five minutes before turning off the power or water leakage and other problems may occur.
- **Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals.**
  Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Please instruct the customer to keep the area around the unit clean.

NOTE

- **Install the indoor and outdoor units, power supply wiring, and connecting wires at least 3.5 ft. away from televisions or radios in order to prevent image interference or noise.**
  Depending on the radio waves, a distance of 3.5 ft. may not be sufficient to eliminate the noise.
- **Remote controller (wireless kit) transmitting distance is shorter than expected in rooms with electronic fluorescent lamps**
  Install the indoor unit as far away from fluorescent lamps as possible.
- **Arrange the drain hose to ensure smooth drainage.**
  Incomplete drainage may cause leaks in the building and on furniture.
- **Radio interference may result if installed too close to other electrical devices.**

- **Dismantling of the unit, and treatment of the refrigerant, oil, and other parts, should be done in accordance with the relevant local and national regulations.**

2. BEFORE INSTALLATION

- **When moving the unit while removing it from the packing case, be sure to lift it by the four hanger brackets. Avoid putting any pressure on other parts especially the refrigerant piping.**
- **When moving the unit while removing it from the packing case, be sure to lift it by the four hanger brackets. Avoid putting any pressure on other parts, especially the refrigerant piping.**
- Be sure to check the type of R-410A refrigerant to be used before installing the unit as using an incorrect refrigerant will prevent normal operation of the unit.
- The accessories needed for installation must be retained in your custody until the installation work is completed. Do not discard them!
- Decide upon a line of transport.
- Leave the unit inside its packaging until reaching the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates, together with a rope when lifting, to avoid damage or scratches to the unit.
- When moving the unit after opening, hold the unit by the hanger brackets (× 4). Do not apply force to the refrigerant piping, drain piping or plastic parts.
- For the installation of an outdoor unit, refer to the installation manual attached to the outdoor unit.
- Do not install or operate the unit in the following areas:
  - **Kitchens or rooms that might be laden with mineral oil, or filled with oil vapor or spray. Plastic parts may deteriorate and eventually cause the unit to fall out of place or leaks.**
  - **Where sulfurous or other corrosive gas exists. Copper tubing and brazed spots may corrode and lead to refrigerant leaks.**
  - **Where machines generate electromagnetic waves and cause the control system to malfunction.**
  - **Where the air contains high levels of salt as near the ocean, and where voltage fluctuates greatly as in factories.**
    Also in vehicles or vessels.
  - This unit, both indoor and outdoor, is suitable for installation in a commercial and light industrial environment. If installed as a household appliance it could cause electromagnetic interference

⚠ WARNING

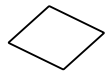
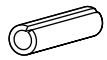
- Entrust installation to the place of purchase or a qualified serviceman. Improper installation could lead to leaks and, in worse cases, electric shock or fire.
- Use of unspecified parts could lead to the unit falling, leaks and, in worse cases, electric shock or fire.

⚠ NOTE

- Be sure to read this manual before installing the indoor unit.
- Be sure to procure an air filter in the field and mount it in the suction air passage to prevent water leaking, or other problems.

2-1 ACCESSORIES

Check the following accessories are included with your unit.

Name	Metal clamp	Paper pattern for installation	Drain hose	Insulation for fitting
Quantity	1 pc.	1 pc.	1 pc.	1 each.
Shape				 for gas pipe for liquid pipe

Name	Sealing pad	Screws for duct flanges	
Quantity	1 each	1 set	
Shape	Large mid		FXSQ12MVJU: 6 FXSQ18MVJU: 8 FXSQ24MVJU: 12 FXSQ30 · 36 · 48MVJU: 16

Name	Washer for hanger bracket	Clamp	Screws for fixing the paper pattern for installation	(Other)
Quantity	8 pcs.	6 pcs.	6 pcs.	• Operation manual • Installation manual • Sealing material (Small 1 3/8×5 7/8) (2 pcs.)
Shape				

• Screws for fixing panels are attached to decoration panel.

2-2 OPTIONAL ACCESSORIES

- Parts listed on the below table are required with this indoor unit.

Table 1

Model	Min. height above ceiling (in.)	Air inlet panel		Canvas connection for air inlet panel
		Color	White	
FXSQ12MVJU	16 3/4 or more *	BYBS32DJW1		Installation not required
	13 3/4 or more			KSAJ25K36
FXSQ18MVJU	16 3/4 or more *	BYBS45DJW1		Installation not required
	13 3/4 or more			KSAJ25K56
FXSQ24MVJU	16 3/4 or more *	BYBS71DJW1		Installation not required
	13 3/4 or more			KSAJ25K80
FXSQ30 · 36 · 48MVJU	16 3/4 or more *	BYBS125DJW1		Installation not required
	13 3/4 or more			KSAJ25K160

* A minimum height of 16 3/4" from the ceiling is required to install the canvas connection for the air inlet panel.

Table 2

Remote controller	
Wired type	BRC1D71

FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.

a. Items to be checked after completion of work

Items to be checked	The following problems may occur If not properly done:	Check
Are the indoor and outdoor unit fixed firmly?	Units may drop, vibrate, or make noise.	
Is the gas leak test finished?	May result in insufficient cooling.	
Is the unit fully insulated?	Condensate water may drip.	
Does drainage flow smoothly?	Condensate water may drip.	
Does the power supply voltage correspond to that shown on the name plate?	Unit may malfunction or the components burn out.	
Are wiring and piping correct?	Unit may malfunction or the components burn out.	
Is the unit safely grounded?	Danger of electrical leakage.	
Is wiring size according to specifications?	Unit may malfunction or the components burn out.	
Is something blocking the air outlet or inlet of either the indoor or outdoor units?	Insufficient cooling.	
Are refrigerant piping length and additional refrigerant charge noted?	Refrigerant charge in the system is not clear.	

b. Items to be checked at time of delivery

Also review the “SAFETY CONSIDERATIONS”

Items to be checked	Check
Did you explain about operations while showing the operation manual to your customer?	
Did you hand the operation manual over to your customer?	

2-3 NOTE TO THE INSTALLER

Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions, and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

3. SELECTING INSTALLATION SITE

Attach additional thermal insulation material to the unit body when it is believed that the relative humidity in the ceiling exceeds 80%. Use glass wool, polyethylene foam, or similar with a thickness of 3/8” or more as thermal insulation material.

(1) Select and installation site that meets your customer’s approval and where the following conditions are fulfilled:

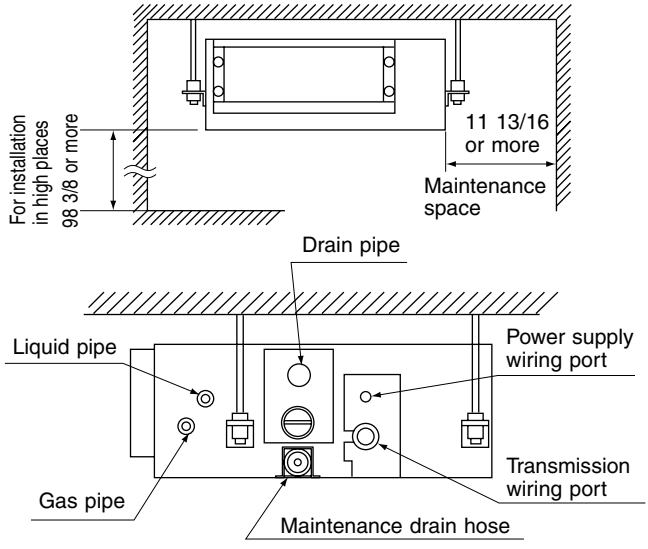
- The upper space (including the back of the ceiling) of the indoor unit has no possibility of dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- Optimum air distribution can be ensured.
- Nothing blocks air passage.
- Condensate can be properly drained.
- In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- False ceiling is not noticeably on an incline.
- Sufficient clearance for maintenance and service can be ensured.
- Piping between indoor and outdoor units is possible within the allowable limit. Refer to the installation manual for the outdoor unit.

⚠ DANGER

- Do not install unit in an area where flammable materials are present due to the risk explosion resulting in serious injury or death.
- If the supporting structural members are not strong enough to bear the unit’s weight, the unit could fall out of place and cause serious injury.

⚠ NOTE

- Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5 ft. away from televisions or radios in order to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 ft. may not be sufficient enough to eliminate the noise.



(length: in.)

NOTES:

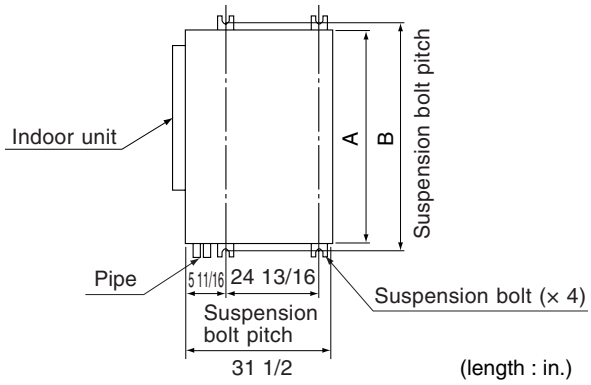
- Install this unit where the height of the bottom panel is more than 8.2 feet (2.5 m) so that the user cannot easily touch it.
- If installing the wireless kit in a room with electronic fluorescent lighting, the remote controller’s transmission distance may be shortened. Indoor units should be installed as far away from fluorescent lighting as possible.

- Install the indoor and outdoor units, power supply wiring, and connecting wires at least 3.5 ft. (1.1 m) away from televisions or radios in order to prevent image interference or noise.
  Depending on the radio waves, a distance of 3.5 ft. (1.1 m) may not be enough to eliminate the noise.

(2) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.
Refer to the paper pattern for check for points requiring reinforcing.

4. PREPARATIONS BEFORE INSTALLATION

(1) Relation of ceiling opening to unit and suspension bolt position

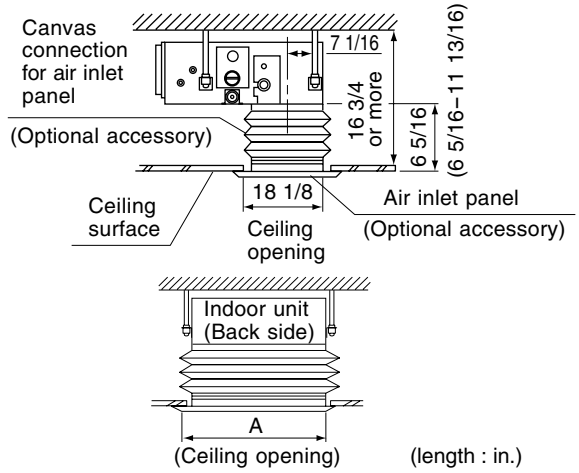


Model	A (in.)	B (in.)
FXSQ12MVJU	21 5/8	23 5/8
FXSQ18MVJU	27 9/16	29 1/2
FXSQ24MVJU	39 3/8	41 5/16
FXSQ30 · 36 · 48MVJU	55 1/16	57 1/16

- For standard installation (air inlet on the bottom side), choose one of the two following means of installation.

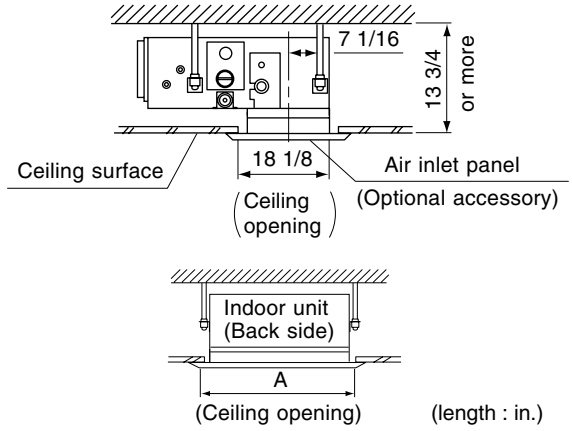
Note: For other than standard installation, contact your Daikin dealer for details.

For mounting air inlet panel with canvas connection, use the following diagram:



Model	A (in.)
FXSQ12MVJU	24
FXSQ18MVJU	29 7/8
FXSQ24MVJU	41 11/16
FXSQ30 · 36 · 48MVJU	57 7/16

For mounting air inlet panel directly, use the following diagram:

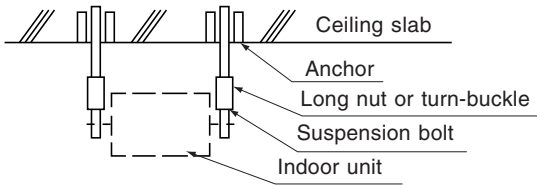


Model	A (in.)
FXSQ12MVJU	24
FXSQ18MVJU	29 7/8
FXSQ24MVJU	41 11/16
FXSQ30 · 36 · 48MVJU	57 7/16

(2) The fan speed for this indoor unit is preset to provide standard external static pressure.

- If higher or lower external static pressure is required, reposition the adapter for the PC board. **See Section 9, Wiring Example and How to Set the Remote Controller.**

〈Installation example〉



Note: All the above parts are field supplied.

(3) Install the suspension bolts using bolts of 3/8" diameter.

Use a hole-in-anchor, sunken insert, sunken anchor for existing ceilings, and use a sunken insert, sunken anchor, or other part to be procured in the field to reinforce the ceiling to bearthe weight of the unit.

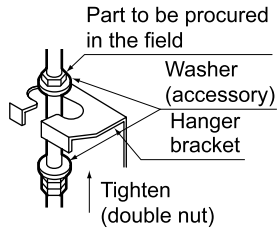
5. INDOOR UNIT INSTALLATION

Installing optional accessories (except for the decoration panel) before installing the indoor unit is easier.

bBe sure to use accessories and parts provided by Daikin AC.

(1) Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt securely by using a nut and washer from the upper and lower sides of the hanger bracket.

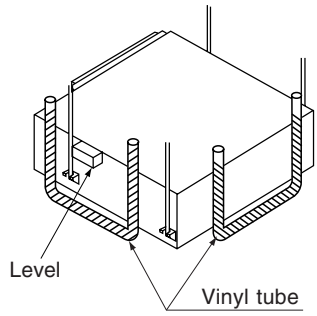


[Securing the hanger bracket]

(2) Ensure that the unit is horizontally level.

NOTE

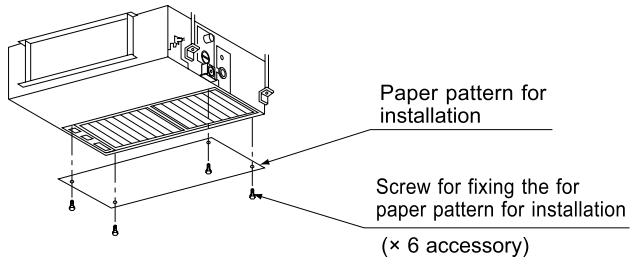
- The indoor unit is equipped with a built-in drain pump and float switch. At each of the unit's 4 corners, verify that it is level by using a level or a water-filled vinyl tube. If the unit is inclined against condensate flow, the float switch may malfunction and cause water to drip.



(3) Tighten the upper nut.

(4) Attach paper pattern for installation.

- The paper pattern for installation corresponds with the measurements of the ceiling opening. Consult the builder for details.
- Attach the paper pattern for installation to the unit with the screws as shown in the drawing.
  The paper pattern for installation is marked for 3 types of ceiling openings. Read the notations carefully when installing.



6. REFRIGERANT PIPING WORK

6-1 GENERAL INSTRUCTIONS

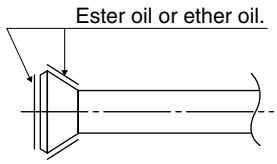
- To install refrigerant piping to outdoor units, see the installation manual attached to the outdoor unit.
- Before performing refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.
- Make sure the outdoor unit is charged with refrigerant.

NOTE

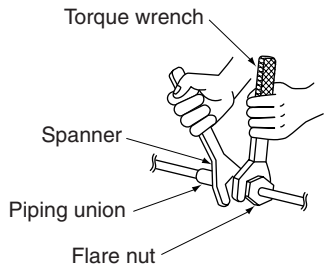
- Use a pipe cutter and flare suitable for the type of refrigerant.
- To prevent dust, moisture or other foreign matter from infiltrating the tube, either pinch the end or cover it with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room immediately.

6-2 Connecting the refrigerant piping

- When connecting the flare nut, coat the flare both inside and outside with ester oil or ether oil and initially tighten by hand 3 or 4 turns before tightening firmly.

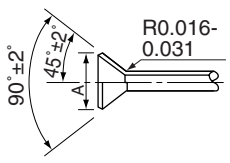


- To prevent flare nut cracking and gas leaks, be sure to use both a spanner and torque wrench together, as shown in the drawing below, when connecting or disconnecting pipes to/from the unit.



- Refer to Table 3 for the dimensions of flare nut spaces and proper tightening torque.

Table 3

Pipe size	Tightening torque (ft.lbf)	Flare dimensions A (in.)	Flare shape (in.)
ϕ 1/4”	10.4 – 12.7	0.342-0.358	
ϕ 3/8”	24.1 – 29.4	0.504-0.520	
ϕ 1/2”	36.5 – 44.5	0.638-0.654	
ϕ 5/8”	45.6 – 55.6	0.760-0.776	

NOTE

- Apply ester oil or ether oil around the flare portions before connecting.
- The flare nuts used must be those included with the main body.
- Over-tightening may damage the flare and cause a refrigerant leakage.

Not recommendable but in case of emergency

You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

After the work is finished, make sure to check that there is no gas leak.

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut the angle shown below:

Table 4

Pipe size	Further tightening angle	Recommended arm length of tool (in.)
ϕ 1/4”	60 to 90 degrees	Approx. 5 7/8
ϕ 3/8”	60 to 90 degrees	Approx. 7 7/8
ϕ 1/2”	30 to 60 degrees	Approx. 9 13/16
ϕ 5/8”	30 to 60 degrees	Approx. 11 13/16

6-3 Piping Insulation

- Execute heat insulation work completely on both sides of the gas piping and the liquid piping or a water leakage can result .
- When using a heat pump, the temperature of the gas piping can reach approximately 250°F, so use sufficiently resistant insulation.
- Where the temperature and humidity of the refrigerant piping sections might exceed 86°F or RH80%, reinforce the refrigerant insulation (13/16” or thicker) or condensation may form on the surface of the insulating material.
- Check the pipe connector for gas leaks, then insulate it as shown in the drawing below.
- Make absolutely sure to install heat insulation on the pipe-connecting section after checking gas leakage. Thoroughly studythe following figure and use the attached heat insulating materials for fitting. Fasten both ends with the accessory clamps.
- Wrap the accessory sealing pad around the insulation only for the joints on the gas piping side.

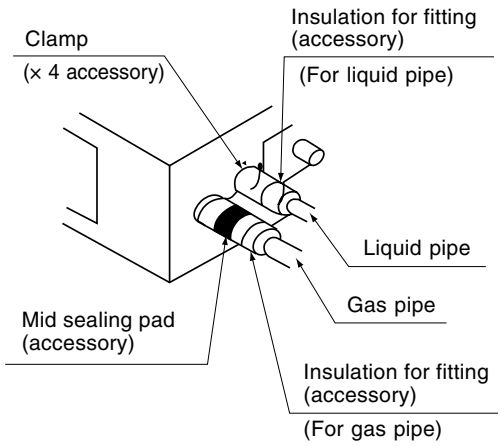


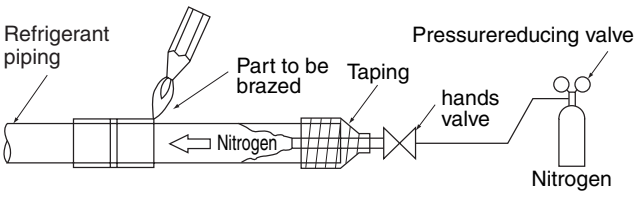
Fig. 1

⚠ CAUTION

- Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

6-4 Brazing Refrigerant Piping

- Before brazing local refrigerant piping, blow nitrogen gas through the piping to expel air. If this is not done, a large amount of oxide film develops inside the piping and could cause system malfunction.
- Only begin brazing after having carried out nitrogen substitution or while inserting nitrogen into the refrigerant piping. Once this is done, connect the indoor unit with a flared or a flanged connection.
- Nitrogen should be set to 2.9 psi with a pressure-reducing valve if brazing while inserting nitrogen into the piping.



⚠ DANGER

- Use of oxygen may cause an explosion resulting in serious injury or death. Use only nitrogen gas.

⚠ NOTE

- Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filter metal (BCuP) which does not require flux.

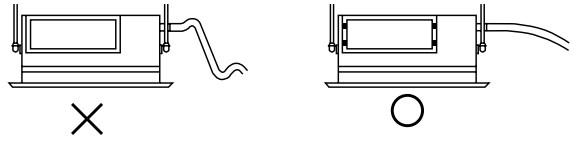
  (Flux has an extremely negative effect on refrigerant piping systems. For instance, if chlorine based flux is used, it will cause pipe corrosion. Flux containing fluorine will damage refrigerant oil.)

7. DRAIN PIPING WORK

Install the drain pipe as shown below and take measures against condensation. Improperly installed piping could lead to leaks on furniture and belongings.

(1) Install the drain piping.

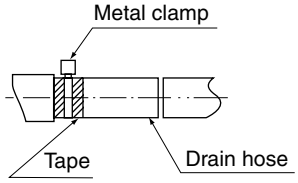
- The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe (vinyl tube pipe size: 1 3/16"; outer dimension: 1 1/4").
- Keep the drain pipe short and sloping downward at a gradient of at least 1/100 to prevent air pockets from forming.
- If the drain hose cannot be sufficiently set on a slope, execute the drain-raising pipe.
- To keep the drain hose from sagging, use support spacing every 3.28 to 4.92 ft.

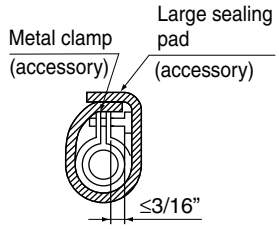


⚠ NOTE

- Setting the unit at an angle opposite to the drain piping might cause leaks.

- Use the drain hose and the metal clamp. Tighten the clamp firmly. Insert the drain hose into the drain socket, up to the tape. Tighten the clamp until the screw head is less than 3/16" from the hose.
- Wrap the sealing pad over the metal clamp and drain hose to insulate.
- Insulate the drain hose inside the building.



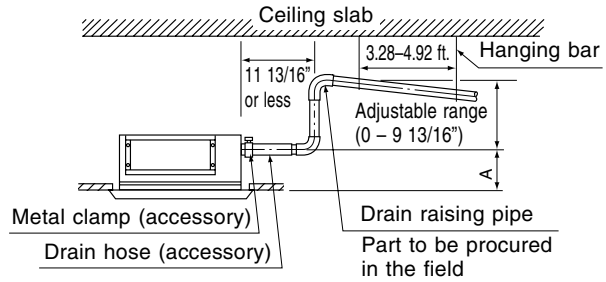


PRECAUTIONS FOR DRAIN-RAISING PIPING

HOW TO INSTALL PIPING 〉

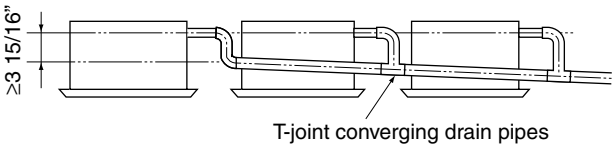
- Connect the drain hose to the drain-raising pipes, and insulate them.
- Connect the drain hose to the drain outlet on the indoor unit, and tighten it with the metal clamp.

  Insulate both metal clamp and drain hose with the sealing pad.



	A (in.)
When canvas duct is installed	13 3/4 – 20 7/8
When air inlet panel is directly installed	10 13/16

- If converging multiple drain pipes, install according to the procedure shown below.



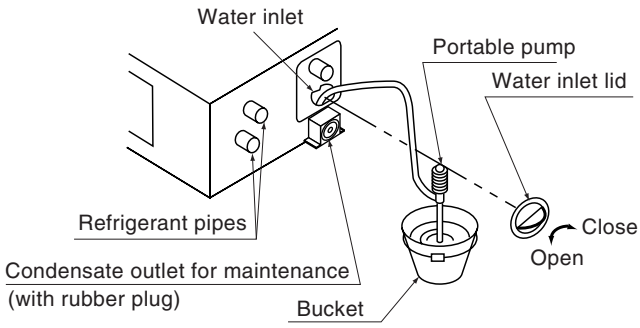
Select converging drain pipes with gauges suitable for the operating capacity of the unit.

NOTE

- Drain piping connections
  Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Remember that blockage results from water collecting on the drain pipe.

(2) After piping work is finished, check that drainage flows smoothly.

- Open the water-inlet lid and gradually add approximately 61 cubic inches of water; then check drainage flow.



≪ Adding water from inspection opening ≫

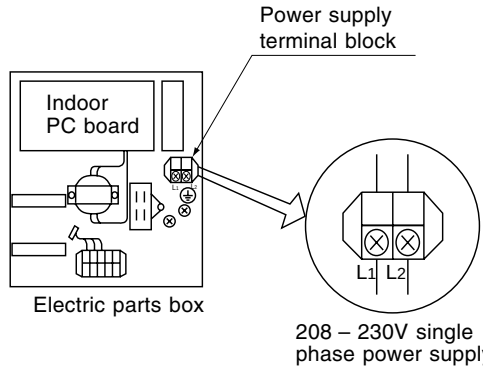
Note: Use this outlet to condensate water from the drain pan.

WHEN ELECTRIC WIRING WORK IS FINISHED:

- Check drainage flow during COOL running, explained under **TEST OPERATION.**

WHEN ELECTRICAL WIRING WORK IS NOT FINISHED:

- Remove the electric parts box lid, connect a power supply and remote controller to the terminals.
  (Refer to ***HOW TO CONNECT WIRINGS***,



- Be sure attach the electric parts box lid before turning on the power.

  Next, press the inspection/test operation button " TEST " on the remote controller. The unit will engage the test operation mode. Press the operation mode selector button " " until selecting FAN OPERATION " ". Then, press the ON/OFF button " ". The indoor unit fan and drain pump will start up. Check that the water has drained from the unit.

  Press " TEST " to go back to the first mode.
- You can check whether drainage is satisfactory or not by removing the access opening lid and checking the water level of the drain pan through the access opening.
- **Be careful when doing so because the fan is turning at the same time.**

8. ELECTRIC WIRING WORK

8-1 GENERAL INSTRUCTIONS

- All field supplied parts and materials, and electrical works must conform to local codes.
- Use copper wire only.
- Follow the ***WIRING DIAGRAM*** attached to the unit body to wire the outdoor unit, indoor units, and the remote controller. For details on connecting the remote controller, refer to the ***INSTALLATION MANUAL OF REMOTE CONTROLLER***.
- All wiring must be performed by an authorized electrician.
- This system consists of multiple indoor units. Mark each indoor unit as unit A, unit B, and so forth. Ensure the terminal board wiring to the outdoor unit and BS unit are properly matched. If controls wiring and piping between the outdoor and indoor units are mismatched, a communications malfunction is likely.
- A circuit breaker capable of shutting down the power supply to the entire system must be installed.

8-2 ELECTRICAL CHARACTERISTICS

Units				Power supply		Fan motor	
Model	Hz	Volts	Voltage range	MCA	MFA	W	FLA
FXSQ12MVJU	60	208-230	Max. 253 Min. 187	0.7	15	50	0.6
FXSQ18MVJU				1.0	15	85	0.8
FXSQ24MVJU				1.4	15	125	1.1
FXSQ30MVJU				1.8	15	225	1.4
FXSQ36MVJU				1.8	15	225	1.5
FXSQ48MVJU				2.4	15	225	2.0

MCA:Min. Circuit Amps (A); MFA:Max. Fuse Amps (A)
kW: Fan Motor Rated Output (W); FLA:Full Load Amps (A)

8-3 SPECIFICATIONS FOR FIELD SUPPLIED FUSES AND WIRE

Model	Power supply wiring		Remote controller wiring Transmission wiring	
	Field fuses	Size	Wire	Size
FXSQ12MVJU FXSQ18MVJU FXSQ24MVJU FXSQ30MVJU FXSQ36MVJU FXSQ48MVJU	15A	Wire size must comply with local codes.	2 conductor, stranded copper, non-shielded, PVC or vinyl jacket	AWG 18

1. **Allowable length of transmission wiring between indoor/outdoor units and between the indoor unit and the remote controller is as follows:**
   (1) Outdoor unit – Indoor unit:
   Max. 3280 ft. (1000 m); Total wiring length: 6560 ft. (2000 m)
   (2) Indoor unit – Remote controller:
   Max. 1640 ft. (500 m)
2. Insulated thickness: 1/16” (27 mm) or more

9. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER

9-1 HOW TO CONNECT WIRINGS

- Lower the electric parts box, as shown in the drawing, to make connections.

NOTE

- After wiring is completed, apply the sealing material (1-3/8” × 5-7/8”) around the wires as shown below. This prevents water seepage into the electric parts box.

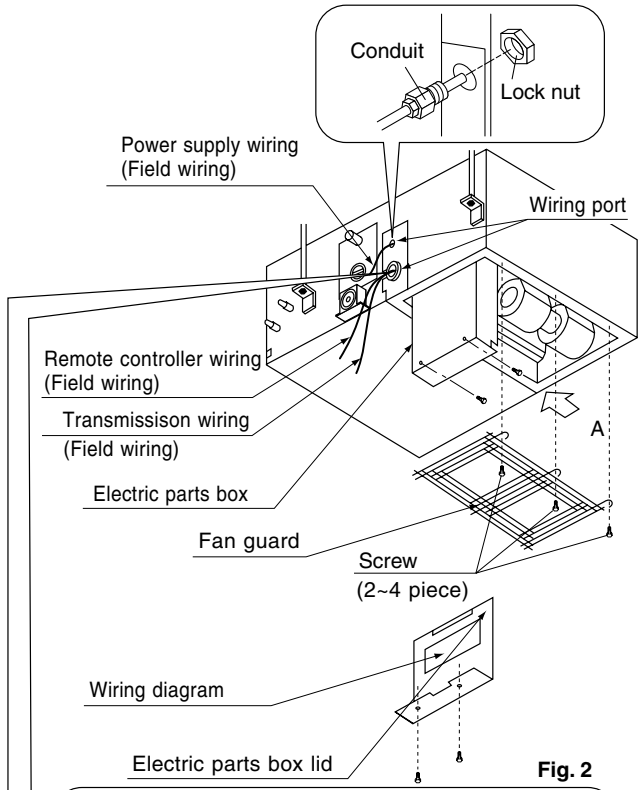
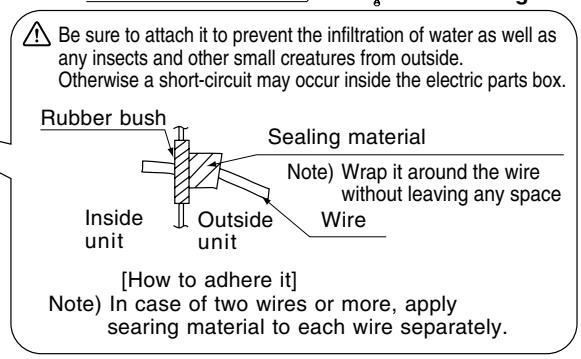


Fig. 2


Be sure to attach it to prevent the infiltration of water as well as any insects and other small creatures from outside.
Otherwise a short-circuit may occur inside the electric parts box.
Rubber bush
Sealing material
Note) Wrap it around the wire without leaving any space
Inside unit
Outside unit
Wire
[How to adhere it]
Note) In case of two wires or more, apply searing material to each wire separately.

WARNING

- Use only specified wire and connect wires to terminals tightly. Be careful that wires do not place external stress on terminals. Keep wires in neat order so as to not to obstruct other equipment. Make sure that the electric parts box lid closes tightly. Incomplete connections could result in overheating, and in worse cases, electric shock or fire.
- **Improper installation may result in water leakage, electric shocks, or fire. Never connect power supply wiring**

to the terminal block for remote control wiring or it could damange the entire system.

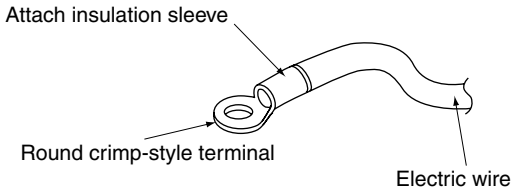
- Improper installation can lead to leaks and, in worst cases, electric shock, or fire.

⚠ CAUTION

- To avoid short circuits in the electric parts box, be sure to apply the sealing material or putty (not included) to the wiring hole to prevent the infiltration of water, insects or other small creatures.
- When clamping the wires, be sure no pressure is applied to the wire connections by using the included clamping material to make appropriate clamps. Also, when wiring, make sure the lid on the electric parts box fits snugly by arranging the wires neatly and attaching the electric parts box lid firmly. When attaching the electric parts box lid, make sure no wires get caught in the edges. Pass wiring through the wiring through holes to prevent damage to them.
- Make sure the remote controller wiring, the wiring between the units, and other electrical wiring do not pass through the same locations outside of the unit, separating them by at least 1 15/16", otherwise electrical noise (external static) could cause mistaken operation or breakage.

⚠ NOTE

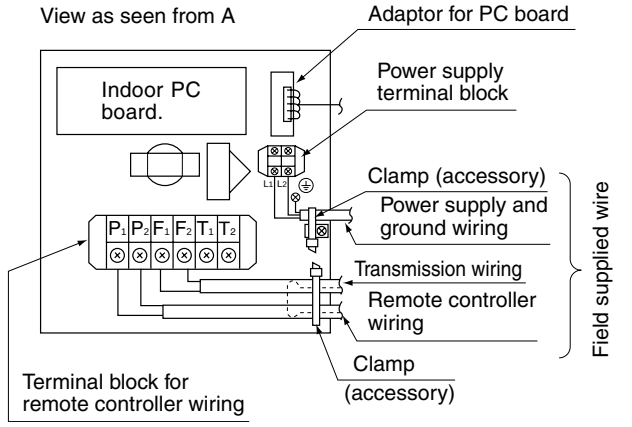
1. Use round crimp-style terminals for connecting wires to the power supply terminal block.
   If unavailable, observe the following points when wiring.
   - Do not connect wires of different gauge to the same power supply terminal as looseness in the connection may cause overheating.
   - Use the specified electric wire. Connect the wire securely to the terminal. Lock the wire down without applying excessive force to the terminal. Tightening torque: 0.97ft.lbf ±10 %



2. Tightening torque for the terminal screws.
   - Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
   - If the terminal screws are tightened too hard, screws might be damaged.
   - Refer to the table below for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque (ft.lbf)
Terminal block for remote controller (6P)	M3.5	0.58 – 0.72
Power supply terminal block	M4	0.87 – 1.06
Ground terminal	M4	1.06 – 1.43

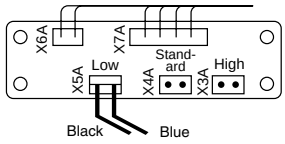
3. Do not connect wires of different gauge to the same grounding terminal. Looseness in the connection may deteriorate protection.
4. Outside of the unit, keep transmission wiring at least 1 15/16" away from power supply wiring. The equipment may malfunction if subjected to electrical (external) noise.

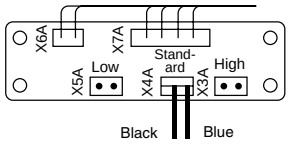


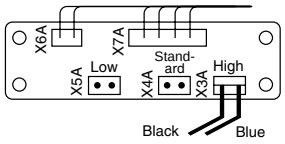
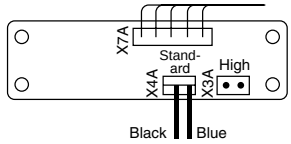
5. For remote controller wiring, refer to the ***INSTALLATION MANUAL OF REMOTE CONTROLLER*** attached to the remote controller.
6. Use only specified wire and connect wires to terminals tightly. to terminals. Be careful wires do not place external stress on terminals. Keep wiring in neat order so as not to obstruct other equipment. Make sure the lid closes tightly. Incomplete connections can result in overheating and, in worse cases, electric shock or fire.

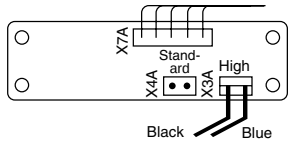
9-2 SETTING OF STATIC PRESSURE CHANGEOVER CONNECTOR

- According to the system static pressure requirement, reposition the adaptors of PC board inside the electric parts box as shown in the following drawings.

<table>
<tr><th>Model</th><th>Static pressure</th></tr>
<tr><td>FXSQ12· 18 · 24MVJU</td><td>Low
 

Standard
 

High
 
</td></tr>
<tr><td>FXSQ30 · 36 · 48MVJU</td><td>Low
Not available
Standard
 

High
 
</td></tr>
</table>

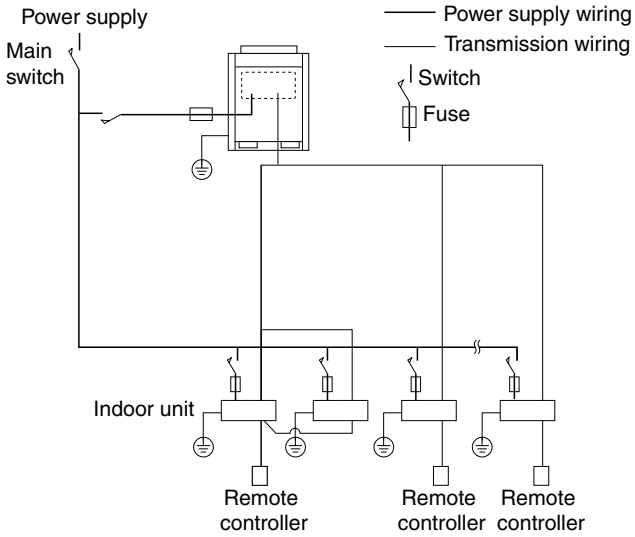
NOTE

- The unit is factory set for standard static pressure (X4A) at the time of shipping.

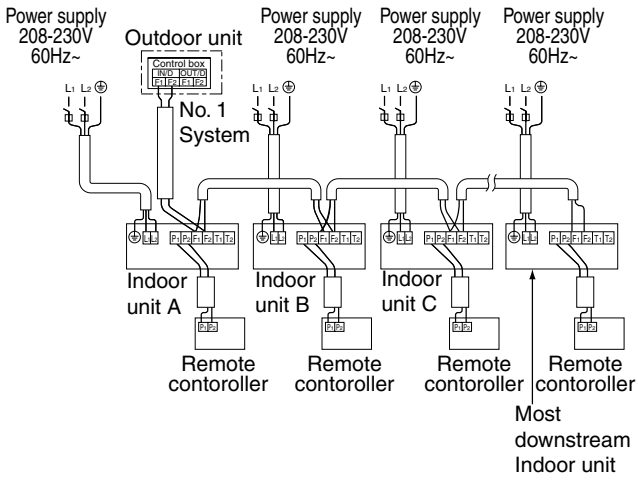
9-3 WIRING EXAMPLE

- Fit the power supply wiring of each unit with a switch and fuse as shown in the drawing.

COMPLETE SYSTEM EXAMPLE



1. When using 1 remote controller for 1 indoor unit. (Normal operation)



2. For group control or use with 2 remote controllers

Note: It is not necessary to designate indoor unit address when using group control.
The address is automatically set when power is activated.

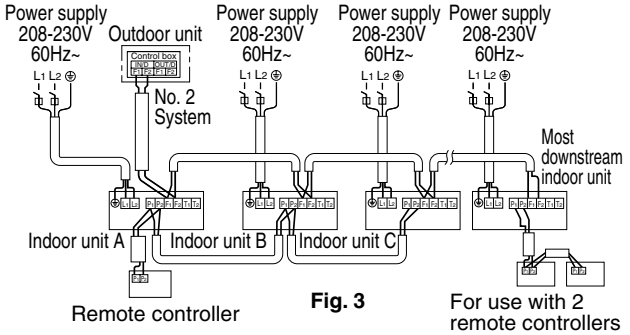


Fig. 3

NOTE

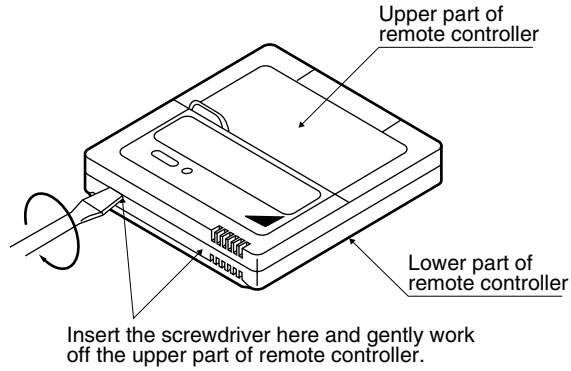
1. A single switch can be used to supply power to units on the same system. However, branch switches and branch circuit breakers must be selected carefully.
2. Do not ground the equipment on gas pipes, water pipes or lightning rods, or crossground with telephones. Improper grounding could result in electric shock.

9-4 CONTROLLING 1 INDOOR UNIT BY 2 REMOTE CONTROLLERS

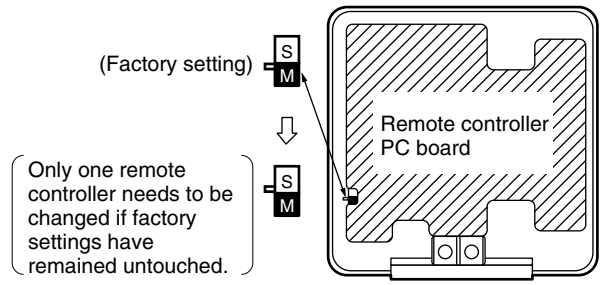
When using 2 remote controllers, one must be set to **MAIN** and the other to **SUB**.

MAIN/SUB CHANGEOVER

(1) Insert a ⊖ screw driver into the recess between the upper and lower part of remote controller and, working from the 2 positions, pry off the upper part.
The remote controller PC board is attached to the upper part of remote controller.


Upper part of remote controller
Lower part of remote controller
Insert the screwdriver here and gently work off the upper part of remote controller.

(2) Turn the MAIN/SUB changeover switch on one of the two remote controller PC boards to **S**.
Leave the switch of the other remote controller set to **M**.



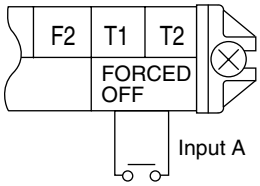
Wiring Method See **Section 8, ELECTRICAL WIRING WORK.**

(3) Remove the electric parts box lid

(4) Add remote controllers 2 (slave) to the terminal block for remote controller (P1, P2) in the electric parts box. There is no polarity. Refer to Fig. 3 and 8-3.

9-5 COMPUTERIZED CONTROL: FORCED OFF AND ON/OFF OPERATION

(1) Wire specifications and how to perform wiring
- Connect the input from outside to terminals T1 and T2 of the terminal block for remote controller.



Wire specification	2-conductor, stranded, non-shielded copper cable / PVC or vinyl jacket
Gauge	AWG 18
Length	Max. 328 ft. (100 m)
External terminal	Contact that can ensure the minimum applicable load of 15 V DC, 10 mA.

2. Actuation
- The following table explains FORCED OFF and ON/OFF OPERATIONS in response to Input A. The T1-T2 terminals are standard on all Daikin indoor units and allow for remote starting and stopping of equipment. Individual indoor units can be field prgrammed at the remote controller to change the T1-T2 sequence of operation of the equipment based upon the application.

FORCED OFF (Manual Restart) Mode No. 12 First Code No. 1 Second Code No. 01 **DEFAULT SETTING**	**ON/OFF OPERATION** Mode No. 12 First Code No. 1 Second Code No. 02
Input A OFF (Open Circuit) An open circuit between terminals T1 and T2 allows the unit to run normally.	**Input A OFF (Open Circuit)** An open circuit between terminals T1 and T2 prevents unit operation.
Input A ON (Closed Circuit) Closing the normally open circuit between terminals T1 and T2 stops operation of the unit. When T1-T2 is opened, the unit must be restarted with the remote controller. .	**Input A ON (Closed Circuit)** A closed circuit between terminals T1 and T2 allows normal operation of the unit.

3. How to select FORCED OFF and ON/OFF OPERATION
- Turn the power on and then use the remote controller to select operation. These codes are programmed at the remote controller. Individual unit groups can be programmed independently.

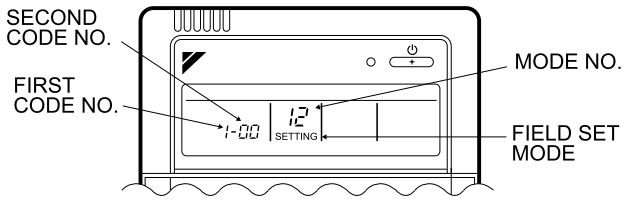
9-6 CENTRALIZED CONTROL

- For centralized control, it is necessary to designate the group No. For details, refer to the manual of each optional controller for centralized control.

10. FIELD SETTING

Make sure the terminal box lids are closed on the indoor and outdoor units.
Field setting must be made from the remote controller in accordance with the installation condition.

- Setting can be made by changing the **MODE NO.**, **FIRST CODE NO.**, and **SECOND CODE NO.**.
- For setting and operation, refer to the **FIELD SETTING** in the installation manual of the remote controller.



- Set the remote controller to the field set mode. For details, refer to the **HOW TO SET IN THE FIELD**, in the remote controller manual.
- When in the field set mode, select mode No. 12, then set the first code (switch) No. to [1]. Then set second code (position) No. to [01] for FORCED OFF and [02] for ON/OFF OPERATION. (FORCED OFF at factory set).

11. TEST OPERATION

Refer to the installation manual of the outdoor unit.

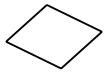
- The operation lamp of the remote controller will flash when a malfunction occurs. Check the malfunction code on the display to identify the problem. An explanation of malfunction codes and the corresponding trouble is provided in the Service Manual for theoutdoor unit.
  If any of the items in Table are displayed, there may be a problem with the wiring or power, so check the wiring again.

Table

Remote control display	Content
Concentrated Management is lit	• There is a short circuit at the FORCED OFF terminals (T1, T2)
U3 is lit	• The check operation has not performed on outdoor unit P.C.B.
U4 is lit **UH** is lit	• The power on the outdoor unit is off. • The outdoor unit has not been wired for power supply. • Incorrect wiring for the transmission wiring and / or FORCED OFF wiring.
No display	• The power on the indoor unit is off. • The indoor unit has not been wired for power supply. • Incorrect wiring for the remote controller wiring, the transmission wiring and / or the FORCED OFF wiring.

11. Accessories

Standard Accessories

Name	Metal clamp	Paper pattern for installation	Drain hose	Insulation for fitting	Sealing pad	Screws for duct flanges
Quantity	1 pc.	1 pc.	1 pc.	1 each.	1 each	1 set
Shape				for gas pipe for liquid pipe	Large mid	

FXSQ12MVJU	6
FXSQ18MVJU	8
FXSQ24MVJU	12
FXSQ30 · 36 · 48MVJU	16

Name	Washer for hanging bracket	Clamp	Screws for fixing the paper pattern for installation	(Other) • Operation manual • Installation manual • Sealing material (Small 1 3/8×5 7/8) (2 pcs.)
Quantity	8 pcs.	6 pcs.	6 pcs.	
Shape				

• Screws for fixing panels are attached to decoration panel.

3P086156-9T

Optional Accessories

No.	Item	Type		FXSQ12MVJU	FXSQ18MVJU	FXSQ24MVJU	FXSQ30MVJU FXSQ36MVJU	FXSQ48MVJU
1	Panel related	Decoration Panel		BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1	
		Access panel		KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W	
2	Filter related	★ High efficiency filter 65%		KAFJ252L36	KAFJ252L56	KAFJ252L80	KAFJ252L160	
		★ High efficiency filter 90%		KAFJ253L36	KAFJ253L56	KAFJ253L80	KAFJ253L160	
		Long life replacement filter		KAFJ251K36	KAFJ251K56	KAFJ251K80	KAFJ251K160	
		Filter chamber	For bottom suction	KAJ25L36D	KAJ25L56D	KAJ25L80D	KAJ25L160D	
			For rear suction	KAJ25L36B	KAJ25L56B	KAJ25L80B	KAJ25L160B	
3	Air inlet and air discharge outlet related	Air suction canvas		KSA-25K36	KSA-25K56	KSA-25K80	KSA-25K160	
		Screening door		KBBJ25K36	KBBJ25K56	KBBJ25K80	KBBJ25K160	
		Air suction flange		KDJ2507K36	KDJ2507K56	KDJ2507K80	KDJ2507K160	
		Air discharge adaptor		KDAJ25K36	KDAJ25K56	KDAJ25K71	KDAJ25K140	

Note:

★ If installing a high filter in the ceiling mounted built-in type, an assembly chamber for either bottom or rear suction is required.

Optional Accessories for controllers are listed in Controllers manual.

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- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

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ISO 9001 is a plant certification system defined by the International Organization for Standardization (ISO) relating to quality assurance. ISO 9001 certification covers quality assurance aspects related to the "design, development, manufacture, installation, and supplementary service" of products manufactured at the plant.

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About ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited compliance organisation as having an appropriate programme of environmental protection procedures and activities to meet the requirements of ISO 14001.

Dealer

DAIKIN AC (AMERICAS), INC.
1645 Wallace Drive, Suite 110
Carrollton, TX75006
info@daikinac.com
www.daikinac.com

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